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The development and extension of nursery schools and kindergartens are discussed. Research reveals that a well-planned program can aid physical, social, emotional, and intellectual development of the students.

Types of schools include those completely within public systems, parent co-operatives, and schools sponsored by colleges and universities. Nursery schools and kindergartens for educationally disadvantaged children are being established in many communities, particularly in larger cities. Continued action by state departments of education is essential to guarantee a good quality of education and to provide adequate financing and protective legislation.

In planning programs, the characteristics of young children should be taken into account. Various aspects of the child's development include size, intellectual curiosity, and social skills. The most essential requirements are professional guidance and leadership. Qualified teachers who have broad academic backgrounds, desirable personal qualities, and professional competencies are necessary. Programs provide for activities which draw from all curriculum areas, including social studies, science, language arts, number relationships, health and physical education, and the arts. Adequate outdoor and indoor space, equipment, and materials are essential. The most satisfactory method of reporting a child's growth and progress is the individual parent-teacher conference.

Evaluation of a nursery school or kindergarten environment should account for materials, the quality of programs and teaching, and the amount of parent participation.

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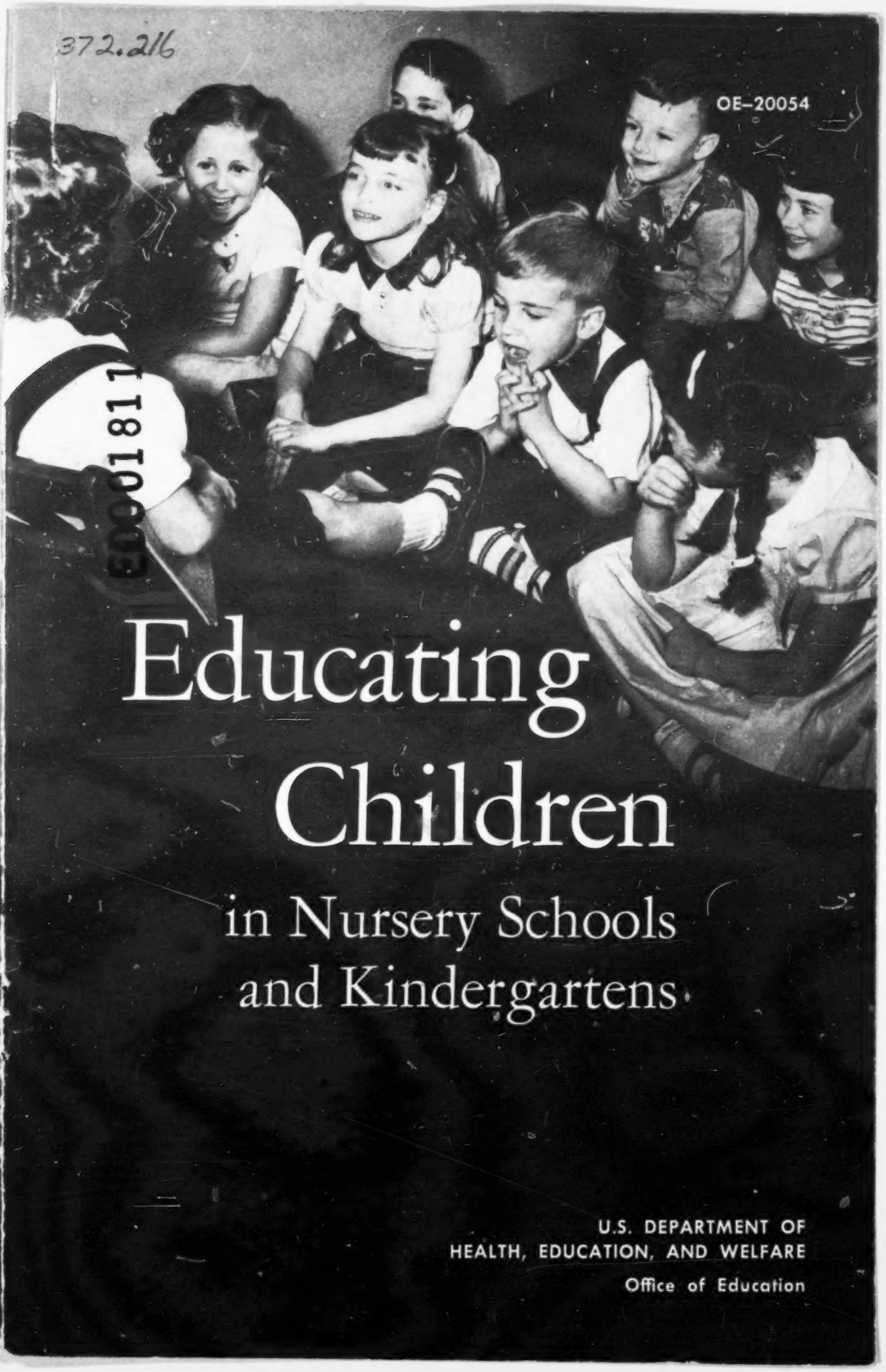

Educating Children in Nursery Schools and Kindergartens

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Office of Education

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Highlights

Kindergartens have a history of about 100 years in American education; nursery schools, nearly 50 years.

* * *

Research reveals the value of providing well-planned education for 3-, 4-, and 5-year-old children.

* * *

Approximately 44 percent, or 2.2 million, of the 5-year-old children in the 50 States attend public kindergartens; 10 percent attend nonpublic kindergartens.

* * *

The most essential requirement for a good educational program for young children is professional guidance and leadership.

* * *

Adequate outdoor and indoor space, equipment and materials, carefully planned and selected, are essential for balanced nursery school and kindergarten experiences.

* * *

Programs in good nursery schools and kindergartens provide for activities which draw from all curriculum areas, such as social studies, science, language arts, number relationships, health and physical education, and the arts.

* * *

The most common and satisfactory method of reporting a child's growth and progress in nursery school and in kindergarten is the individual parent-teacher conference.

* * *

Nursery schools and kindergartens for educationally disadvantaged children are being established in many communities, particularly in larger cities.

* * *

Continued action by State departments of education is essential to guarantee a good quality of education for nursery schools and kindergartens and to provide adequate financing and protective legislation.

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Educating Children in Nursery Schools and Kindergartens

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MAR 1965
DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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Foreword

TODAY'S SCHOOLS for America's children are being reexamined and appraised for the adequacy and value of their programs. Educators and professionals in other disciplines equally concerned about the welfare of preprimary children have emphasized the need for an adequate nursery school and kindergarten experience in the life of a young child in this rapidly changing world. As a result, there is steadily increasing national interest and concern on the part of parents, teachers, administrators, and organized groups to make provisions for a sound education for children under 6 years old.

The Office of Education receives many inquiries from parents, State departments of education, school districts, operators of private schools, and public school personnel for information and materials which deal with current programs and values in nursery school and kindergarten education. Because of this demand a survey was made of the relevant literature and research findings on preprimary education for additional insights in planning for children.

This bulletin is designed to supply help to the field by (*a*) interpreting the objectives of education for young children, (*b*) presenting research on the values of education for young children, (*c*) interpreting programs and standards, (*d*) distinguishing between nursery schools and kindergartens and other types of programs for young children, (*e*) providing guidelines for the establishment and evaluation of nursery schools and kindergartens, and (*f*) interpreting learning and growth characteristics of young children and their implications for the curriculum.

To the schools and school systems throughout the country which contributed photographs for the bulletin, the Office of Education is grateful.

Acknowledgment is made to Dr. Helen Heffernan, chief, Bureau of Elementary Education, California State Department of Education, and to Dr. Laura Hooper, past program coordinator, Association for

Childhood Education International, who read the manuscript and made helpful suggestions for improving it; to Mrs. Hazel Smith, supervisor of music, Montgomery County, Md., Public Schools, for contributing that part of the manuscript which deals with music; and to Mr. Arch K. Steiner, Laws and Legislation Unit, Administration Branch, U.S. Office of Education, for suggestions on school legislation material.

J. DAN HULL
Acting Director
Division of Elementary and Secondary Education

RALPH C. M. FLYNT
Associate Commissioner for Educational Research and Development

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Introduction

Values of Nursery School and Kindergarten Education

THE EDUCATION OF CHILDREN begins in the home. It is there that foundations of learning and living are laid and guidance continues. The effective school supplements and extends these foundations. At the ages of 3, 4, and 5, children reach out for experiences with other children and adults, and for those opportunities to learn and develop which even the most privileged homes lack. These experiences are educative and conducive to growth because they take place in environments that invite learning and are under the leadership of a professional teacher. The total program, including parent involvement, is educationally oriented. The nursery school is the first and the kindergarten the next school experience preceding the first grade.

Homes can rarely provide the space, time, equipment, and other resources found in a good school with which children investigate, experiment, discover, and create. Few parents can give the educational guidance in problem solving and concept formation which a teacher is equipped to provide. Findings give evidence that good schools for children below 6 years old lay the foundation for their later education.

Children under educational guidance develop physical skill, coordination, and power; emotional strength and satisfying relations with peers and adults; healthy self-concepts; and increasing intellectual achievement and competence. Schools for young children provide academic experiences. These are informal and interrelated, but they are not shallow, inconsequential, or incidental. They are genuine. Their depth depends upon the children and available resources, but especially upon the skill and insight of the teacher. The good program keeps pace with the changing world and the consequent changes in the child's social and intellectual needs.

James L. Hymes, in commenting on children's readiness for school, emphasized that—

> . . . young children are ready for experiences in more independence. They are eager for companionship, for seeing and talking with and working side by side with their age mates. They are popping to use their bodies: to test their strength, to climb new heights, to achieve a tingly fitness. They are thirsty for ideas, for new words and new sounds and new sights, for new skills and accomplishments and achievements. And they are full of ideas of their own. Ideas to say, if someone will listen. Ideas to paint out and act out. Ideas to build with if they have the tools, materials, time, and space (24:6).*

Research on Values

The values to children from nursery school and kindergarten experiences have been the subject of a sizable body of research. The findings have not always been in agreement due, in part, to limitations in sampling and to the inappropriateness of assessment techniques employed. The results, however, show that children do benefit in various ways from nursery school and kindergarten attendance (17, 33).

Many of the earlier studies generally were characterized by interest in the effect of early school experience on children's subsequent academic achievement. Later research was concerned with other aspects of development as well.

From a review of 157 research studies, Ann E. Dickerson, in an unpublished study cited by Elizabeth M. Fuller (17), concluded that a full appraisal of the contribution of preprimary education to the growing child was impossible. However, the findings offered some evidence that preprimary education has a favorable influence on later academic achievement, safeguards health, fosters social development, exerts a positive influence on personality growth, and provides an opportunity for acquiring skills needed for intelligent behavior. Dickerson interpreted this as a significant contribution of preprimary education (14).

Clark E. Moustakas made a comprehensive summary of the research on the motor, social, emotional, intellectual, and general adjustment of children with nursery school experience. He reported an advantage in motor development and adjustment in favor of nursery school children, though pointing out limitations in the research. Several studies revealed that with increase in nursery school attendance children were more sociable, constructive, and persistent in their activ-

*Numbers in parentheses are keyed to the references in the bibliography, the number following the colon indicating the page of the reference.

ities; chose friends with more similar interests; and engaged in less solitary play. Other studies suggested that, with training in nursery schools, response to failure situations was more mature, and children showed more persistence and less sensitivity to criticism than did other children.

In the area of intellectual development, the evidence showd that attendance can counteract loss in language development and that kindergarten children with at least 100 days of nursery school are significantly ahead of nonnursery school children on information, reading readiness, and vocabulary tests. Moustakas stressed the values to be gained in training children to handle problems where deprivations and weaknesses are revealed (33). Gregory B. Allen and Joseph M. Masling found that children ranging from 5 to 7 years of age who had attended nursery school were seen by their classmates as having more prestige, being more free and spontaneous, more sure of themselves, and more independent of adults (1).

Jesse B. Rhinehart found that a program conducted by mothers under experienced staff supervision favorably affected the development of the children involved, thus giving support to the benefits of cooperative nursery schools (42).

Research which deals with the values of kindergarten experience indicates that there are fewer failures in later grades among children who attended kindergarten and that they tend to excel in reading, arithmetic, oral language, and social achievement (6, 15, 21, 29, 32, 41).

Norman Arthur found in a large city study that third-grade pupils who had attended kindergarten made more rapid progress than similar children who had not attended. They maintained a higher promotion rate and their marks were somewhat better (3).

A study by Ethel Kunkle and others of the value of kindergarten experience for 4-year-olds demonstrated that children who attended a well-run junior kindergarten for a year show more positive development in behavior, physical growth, and self-concept than comparable children who stayed at home (26).

In a 3-year study of the intellectual development of children in five centers, Kenneth D. Wann and his associates found that children 3 to 6 years of age are collectors of information, employ the elements of concept formation, want to know about the phenomena around them, and learn best through firsthand experiences (50). Similar findings were obtained from a study in developing social science concepts in the kindergarten reported by Bernard Spodeck (43). He concluded that kindergarten children begin to develop social science concepts, gather

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information in many ways, deal with ideas over periods of time, and use some of the tools of the social scientist, such as maps. The results of these studies indicate that children of these ages need programs which stimulate them to make discoveries, solve problems, gain information, and use and test their knowledge.

Needed Research

The value of nursery school or kindergarten experience no doubt depends upon its quality and its appropriateness for the individual child. Quality kindergarten and nursery school education affects children's learning, development, and adjustment favorably. However, a great deal of experimentation and research still needs to be done in this field. Longitudinal studies both in child development centers and in State and local school systems should continue to yield more knowledge on the interrelated aspects of learning and development, and on the effects of different kinds of programs and curriculums on the personality development of children and on their later accomplishments. More research should continue on the value of diagnosing children's handicaps early and providing needed experiences for parents and young children who are deprived of appropriate guidance and education opportunities.

As pointed out by Moustakas, the theory underlying research in this area should be carefully formulated and defined in order that the assumptions and findings in such studies may be clear (33). Such findings are of assistance in planning good programs for young children.

Purpose of Bulletin

This bulletin presents information, secured from research and leaders in the field of early elementary education, on topics which are widely discussed today. It discusses the development and extension of nursery schools and kindergartens, their present status, types, purposes, programs, qualifications and preparation of teachers, environment, the role of parents, and suggested standards. It deals with kindergartens which accommodate 5-year-old children and occasionally the 4-year-olds, and nursery schools for the 3- and 4-year-olds.

History and Present Status

Schools for children under 6 years old were founded on the belief that each child has the right to a fair start in life. This implies, as

pointed out by Dr. Mary Dabney Davis more than 20 years ago, that certain circumstances and opportunities are better than others for young children because they influence the child's thinking, behavior, and development (12:37).

Kindergartens, schools or classes for 5-year-old and some 4-year-old children, have a history of about 100 years in American education. They have come into being and been extended as the result of the leadership, insight, and courage of many educators, professional persons in related fields, and parents in all parts of the country. Nursery schools for younger children came later.

Kindergartens.—Kindergartens started in several different ways. The first kindergarten was opened for German-speaking children in Watertown, Wis., in 1856. Elizabeth Peabody established a private kindergarten for English-speaking children in Boston in 1860. She and her two sisters, Mrs. Horace Mann and Mrs. Nathaniel Hawthorne, interested some of the leading educators, including W. T. Harris (later U.S. Commissioner of Education), in the movement (25:268).

In these early years, kindergartens were opened to children of two distinct groups, those of the well-to-do and those of the immigrant laborers who were coming to this country in large numbers. These schools were supported mainly by tuition fees and by gifts from philanthropists. Thus they served for some time the two ends of the economic scale (12:37).

Kindergartens were first introduced into the public schools in this country when Superintendent of Schools W. T. Harris made them a part of the St. Louis school system in 1873. The program was thus for the first time made available to children of all economic and social levels. The movement spread during the next few years. During this period teacher training schools were opened in the 10 largest cities and in many small cities. Kindergarten associations—including the International Kindergarten Union, the forerunner of the Association for Childhood Education International—were formed throughout the country; and various publications appeared to disseminate information and stimulate interest in kindergarten education. The widespread interest which developed is reflected by the fact that, in 1880, 400 kindergartens had been established in over 30 States (25:268).

By 1900 a kindergarten enrollment of 225,000 was reported to the Federal Office of Education. The Bureau of the Census reported in 1950 that 33.5 percent of the 5-year-old population, or 960,000, were enrolled in public and nonpublic kindergartens (29.2 percent public, 4.3 percent nonpublic) (46:2). The Bureau of the Census in 1963 re-

ported that 2.2 million, or about 54 percent (44 percent public, 10 percent private), of the 5-year-old children were enrolled in kindergartens, public and nonpublic (48:8). The proportion of children attending kindergartens in urban areas in 1960 was about one-half again as high as the corresponding rural-nonfarm proportion and approximately three times as large as the rural-farm proportion (47:4). Forty-two of the 50 States and the District of Columbia reported enrollments to the Office of Education in the fall of 1963 (49:22).

In 1959–1960, 24 of the 50 States contributed State funds to local school systems toward the support of kindergartens (36). However, 32 States provided supervision for programs for children under 6 years old in both public and private schools; and 37 had developed standards for good programs. Nine States had legal mandatory provisions for the accreditation and registration of schools for children under 6, and 10 others provided for accreditation of a voluntary basis of such schools with the State education department (18:1). Thus the States were taking positive actions to improve the quality of education for young children and to safeguard them and their parents from poor programs.

In a 1958 survey of school systems in cities with populations of 2,500 and over, Stuart E. Dean reported that 70.4 percent of the cities supported public kindergartens and that they were financed by public tax funds, by private donations, or by a combination of public and private funds. A total of 80.8 percent financed them with public tax funds (13:10).

In some of the States today kindergartens are well established. In others they are in various stages of development in terms of (*a*) their availability to preprimary grade children and (*b*) the quality of education provided.

Nursery Schools.—The nursery school is a 20th-century development in the United States, beginning around the 1920's. One of the leaders of this period who greatly influenced the development of nursery schools was Prof. Patty Smith Hill, eminent educator in this country. In 1921, Dr. Hill invited Miss Grace Owen, principal of a college in England for training nursery school teachers, to lecture to her graduate students at Teachers College, Columbia University. The following year, she invited an English teacher to demonstrate methods in teaching nursery school children in connection with the Horace Mann School (10:264). This cooperation has been credited in this country as an important influence.

The first nursery schools in this country were started under the auspices of colleges and universities, and served as laboratories for child

study, teacher education, studies in home economics, and parent education.

Nursery school education has been marked by the extraordinary ability and insight of its early leaders. Dr. Arnold Gesell in 1920 began the study of 2-year-old children at the Yale Psycho-Clinic, and Dr. Byrd Baldwin began the study of children from 2 to 4 years of age at the Iowa Child Welfare Research Station in 1921. Dr. Abigail Eliot went to London to study the work of Rachael and Margaret Macmillan and returned to Boston in 1922 to establish the Ruggles Street Nursery (now Eliot-Pearson School, affiliated with Tufts University). This became a center for training nursery school teachers for New England. In Detroit, through the leadership of Dr. Edna White, the nursery school of the Merrill-Palmer School opened in 1922 as a laboratory in child development. Other outstanding centers also trained leaders. Among these was the nursery school at the University of California at Los Angeles, started in 1923 by Miss Barbara Greenwood, a kindergarten training teacher. This school became a part of the University Elementary School and was the first to be established in the West. Lucy Gage, a student of John Dewey, went in 1921 to George Peabody College where her work was a force in the South, particularly in training leaders in early childhood education.

As kindergartens began to be accepted as part of public school systems, leaders of philanthropic organizations who had supported and encouraged them began to modify their services to include nursery education. Thus with the development and research in child growth which was underway in colleges and universities, and with more support from private sources, nursery school education became the frontier of early childhood education.

Nursery schools were opened across the country as private schools, with an occasional public school system operating one or more as laboratories for child study, for secondary school classes, and for parent education purposes. Highland Park, Mich., and Winnetka, Ill., are examples of the few public school systems which established nursery schools. While the Tennessee Valley Authority operated the Norris School (Norris, Tenn.), a nursery school was included in its school program. Others were operated in similar situations.

By 1930 the number of nursery schools had grown to 262. They were distributed among colleges and universities, private schools philanthropic organizations, and public school systems (10:261–268).

The depression of the thirties brought a Federal program of nursery school education, under public school auspices. It was later absorbed

by the Lanham Act program for children, ages 3 through 12, whose parents were employed in defense work. This program was federally financed but sponsored by local public schools. With the close of this nursery school program in 1946, the continuation of such schools has depended upon their being financed with State and local funds. This effort gave impetus to the establishment of numerous nonpublic nursery schools all across the country and to the continuance of some of them under public auspices (45: 3).

The present-day scientific developments in pediatrics, biology, mental health, education, and psychology and the changes in American patterns of living are giving impetus to the growing interest in health, growth, and development of the nursery-age child. There are many indications that privately sponsored nursery schools are rapidly being established; however, there has been no listing of them since 1953, the date of the most recent Merrill-Palmer directory (34). Neither is the enrollment known for the country, although some of the State education departments have collected such data for their States.

The Council of Chief State School Officers has officially recommended the inclusion of nursery schools and kindergartens in the regular State program of approval and accreditation. Seventeen States authorize local schools to establish nursery schools and to use their own funds for this purpose. Thirteen States give local school boards legal authority to use both State and local funds for nursery schools (11: 12).

Dean found that 4.5 percent of the cities studied operate one or more nursery schools, with 45 percent of these financed by a combination of public and private funds. Only 17 percent of the cities which operated nursery schools support them by public tax funds alone (13: 14, 15).

Although the nursery school seems to be the growing edge of early elementary education today, it has not been incorporated into the public schools of this country.

Establishing a Kindergarten or Nursery School

Legislation

ONE OF THE FIRST steps in establishing a kindergarten or nursery school in the public schools is to provide a legal structure for operating nursery schools and kindergartens. Many States already have provisional statutes covering such establishment and operation. One of the necessary provisions is setting minimum and maximum age limits. Some States pass legislation permitting the establishment of nursery schools and kindergartens; some require the establishment under certain conditions. The legal provisions relating to the support of these early elementary programs vary; in some States support is totally local, while in others State support is provided as well. In addition, States may permit local schools to receive private fees or funds. Some States make statutory provision for voluntary or mandatory registration and approval of nonpublic nursery schools and kindergartens (11:3). Those States bringing private schools for young children under the regulations of the State departments of education are improving many of the schools; and those which provide supervision in early elementary education are offering helpful professional leadership.

Communities and local and State groups work according to the provisions of the existing legislation in their respective States. These efforts may be toward securing kindergartens and/or nursery schools in their public schools; or they may be made to get authorization for establishing appropriate standards for them in nonpublic schools. Many States maintain standards for housing, play, space, safety, and health of children in nonpublic nursery schools and kindergartens but do not require certification of teachers (10:24).

Suggestions for Securing Legislation.—The following suggestions for securing legislation have been drawn largely from materials of the American Association of University Women (2) and the Association for Childhood Education International (4):

1. Consult local school authorities
2. Secure information on—
   - The legal provisions in the State for establishing schools for young children or for the authorization of standards for nonpublic nursery schools and kindergartens. (Consult the State department of education.)
   - The adequacy of existing legislation

     Which laws are obsolete?
     Which laws are inadequate?
     Which laws have been enacted but are not enforced, if any?
     What changes are needed?
     What new legislation is needed?
   - The number of children who would attend kindergarten
   - The number of schoolrooms and other facilities which would be needed
   - The number of teachers that would be required to meet the acceptable teacher-pupil ratio
   - Cost of establishing and operating the kindergarten: total and per-pupil cost in communities and States comparable to the one where the legislation is sought
   - Relation of kindergarten costs to other school expenditures in the community and State
   - The amount of money that would be added to a typical tax bill for the establishment of kindergartens
   - Standards for programs, staffing, housing, and equipment
   - Methods which were used in other school communities and States in which kindergartens were established by citizen effort
   - The value to children of kindergarten education
   - Legal provisions of the State relating to private schools for young children.
3. Seek assistance by requesting the support and cooperation of State and local school officials and professional education associations
   - The PTA and other groups directly interested in education
   - Town and State officials
   - Civic leaders
   - Education chairmen of civic and professional clubs
   - Newspaper editors
   - Parents whose children have attended kindergarten
   - Pediatricians and others.

4. Share information through—
   - Personal contacts with individuals
   - PTA, civic, and professional groups
   - Newspapers, radio, and television.
5. Take action by—
   - Selecting a steering committee to present the proposal supported by factual information, adequately documented, to the appropriate legislative committee
   - Securing the help of people experienced in legislation
   - Learning the steps necessary to get a bill through the legislature
   - Obtaining sponsors for the legislation and establishing contacts with the committee members to which the bill is referred.
6. Follow through when legislation has been secured by—
   - Learning its provisions and giving it appropriate publicity
   - Acknowledging the assistance of legislators and others who were responsible for what was accomplished.

Criteria for Effective Legislation.—Legislation which adequately provides for establishing and operating schools for young children should:

- Designate the authority to whom the establishment of kindergartens and/or nursery schools is to be entrusted
- Specify the kind of districts or administrative units in which their establishment is permitted
- State the financial sources from which the support of kindergartens is to be derived
- Designate the kind of teaching certificate to be required and the authority for issuing such certificates
- Specify the authority of State departments of education for setting standards and providing supervision
- Make provisions for the establishment of guidelines, standards, and licensing of nonpublic kindergartens and nursery schools.

Financing and Operating Costs

Methods of financing public kindergartens and nursery schools include: (1) A combination of State and local public funds, (2) local public funds, (3) a combination of public funds and fees, and (4) private funds with local control by the public schools.

The costs for setting up and operating a good school for young children vary according to the location, depending upon cost of liv-

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ing, teachers' salaries, voluntary services, materials donated, and equipment made locally versus the purchase of commercially manufactured items.

One of the first jobs in establishing a nonpublic nursery school or kindergarten is to set up a budget which will insure sound financial operation according to costs of materials and services in various localities. The following items should be included:

- Rental or purchase of the physical plant
- The capital cost of equipping the school, based on whether it is an all-day or half-day operation
- Yearly maintenance and replacement (usually reported at approximately 10 percent of the capital outlay for equipment)
- Teaching and office supplies estimated on a per-child basis
- Custodial and food service, depending upon the length of the session (half or whole day)
- Laundry, maintenance, and utilities
- Liability and property insurance
- Health and other consultive services
- Salaries for teachers, estimated on the same basis as those paid public school teachers of the same professional level in the same locality.

Since the major cost for the operation of any class is the salary of the teacher, school administrators planning for two half-day kindergarten sessions for each teacher estimate the operating cost for a class at a little more than one-half the funds spent for a full-day first-grade class. However, a few public school districts, but more nonpublic schools, are now making teaching assignments to kindergarten teachers on the same full-day basis as to teachers of other grades.

Types of Schools

There are in the United States today different types of schools, both public and nonpublic, for children under 6 years of age. Some are sponsored, administered, and financed by colleges and universities; some, by groups of parents organized and incorporated for this purpose; some, by church groups; some, by one or more individuals as a private enterprise; others, by community agencies or organizations; and still others, by public school districts. The following types are discussed below: Kindergarten, nursery school, parent-cooperative nursery school and kindergarten, laboratory nursery school and kindergarten, parochial nursery school and kindergarten, nursery school and kindergarten for exceptional children, nursery school and kin-

dergarten for the educationally disadvantaged, play group or play school, and day care center.

Kindergarten.—The kindergarten is a school or a division of a school for the preprimary year or years preceding the first grade. It is an integral part of the child's total elementary school program, enabling him, with the help of a professionally qualified teacher, to realize his potentialities more fully. Good kindergarten programs include provisions for close working relationships with parents.

Some schools, more generally nonpublic ones found in a few public school districts, provide a 2-year kindergarten program. These admit children at approximately 4 years of age.

Nursery School.—The nursery school is an educational enterprise for the preprimary year or years prior to kindergarten, organized and maintained on various private bases and sometimes as part of a public school system. It enrolls children generally at 3 and 4 years of age for a 1- or 2-year period. Some children at the age of 2 profit from nursery school. The program and environment are particularly suited to meet the educational and growth needs of these age levels. It shares with parents the responsibility for promoting sound development in a period when growth is rapid and important (27 : 54).

Parent-Cooperative Nursery School and Kindergarten.—This type of nursery school and kindergarten is sponsored and administered as a nonprofit enterprise by a group of parents organized and incorporated for this purpose. Parents find suitable housing, plan the budget, hire the staff, recruit members, obtain suitable equipment on the advice of the teacher, and take turns in assisting with the operation of the school. The expenses of housing, supplies, services, maintenance, and teachers' salaries are budgeted and met by moderate tuition fees agreed upon by the group. Parents and teachers together determine school policies. With the assistance of the teacher and other professional consultants, the parents meet for study and discussion of problems. The professional person provides the leadership for the children's program.

Laboratory Nursery School and Kindergarten.—These schools vary with the purposes of the school and the age range and needs of the children. They are usually established and operated by those departments in a college or university which provide for child study, experimentation, and demonstration pertaining to young children for the benefit of persons working in homemaking, teacher education, research, pediatrics, and nursing. They serve particularly as demonstration centers and laboratories for students preparing to teach in the field of early childhood education. Adequate staff and main-

tenance may be shared by the sponsoring departments or supplemented by fees paid by parents and, in some cases, by grants for research.

Parochial or Church-Sponsored Nursery School and Kindergarten.—This is a school which functions as a part of the educational services of a church. The goals and policies are determined by the church and implemented by a committee of the church board. Many of these schools meet high standards in all phases of their educational programs. The printed materials from church boards and from other publications are written by those with professional competence in early childhood education. Directors and teachers tend to be persons who are active in teachers' organizations and trained to teach young children.

Nursery School and Kindergarten for Exceptional Children.—These schools are for children who are blind, deaf, crippled, mentally handicapped or speech impaired. They include both public and nonpublic, and both day and residential schools. According to the latest figures available to the U.S. Office of Education, there are approximately 3,600 public school systems in the country with provisions for exceptional childern. A number of States, through legislation, have lowered the age at which these children may enter school. The program appears to be growing (28:1).

Some schools are operated by hospitals, clinics, and other institutions, often in conjunction with the local public school district. These schools serve not only the needs of children and their parents but also the educational and research functions of the institution sponsoring them.

Nursery School and Kindergarten for the Educationally Disadvantaged.—Nursery schools and kindergartens for educationally disadvantaged children are rapidly being established in some communities, particularly in larger cities. The schools are aimed at reducing or eliminating educational retardation by (*a*) early identification of the contributory factors to retardation and delinquency, and (*b*) educational programs for young children and their parents which will help overcome or reduce learning handicaps. Professional personnel in mental and physical health, welfare, recreation, and parent education are regularly involved in these projects. Teaching staffs are selected for their special understanding of disadvantaged children and for their competence in teaching them.

These programs are being sponsored by local and State school systems, usually in conjunction with a national foundation and in cooperation with community agencies. Although the movement is recent, the research data warrant the continuance and expansion of these nursery schools and kindergartens.

Play Group or Play School.—This is a program organized by a small group of parents who wish to provide desirable social activities and wholesome play for their children. It is not intended to be a nursery school. The recreational or adult education programs sometimes include provisions for a teacher for the preprimary age groups.

Day Care Center.—A day care center, though not a school, provides services for families with certain kinds of problems, aimed at serving particularly the children of working mothers. This service may also include children of migrant workers, handicapped children, and children of families whose resources are inadequate for providing good care and protection in the home.

The purpose of day care is not primarily educational but designed to meet a social need that stems from a problem or situation existing in the family or because of the family situation in the community (20:101). It is not planned to serve children whose parents desire school opportunities, as is true of the nursery school and kindergarten. Good day care programs in "the preservation of family life . . . provide for many of the lacks in the home, one of which is often the opportunity for intellectual growth and educational stimulation (20:101)."

Planning Programs

WHEN PLANNING PROGRAMS for young children and working with parents and others, teachers draw from their total knowledge and understanding of children. Children in any age group vary widely; therefore, teachers refer to characteristics of growth as clues in studying children and anticipating their later development. Absolute standards for any age group at a given time would preclude a large number of children. Thus, a knowledge of continuous growth trends of children is needed in planning and working with children.

Characteristics of Young Children and Implications

The preprimary child 3, 4, and 5 years of age is active and still growing rapidly, though the rate of his growth tends to slow down somewhat toward the latter part of this age span. He is learning to relate to others positively—a task which when accomplished forms the basis for wholesome human relations. He is developing a self-image. His characteristic curiosity leads him to explore his environment. Thus, through his many sensory and other experiences he increases his interests, understandings, and appreciations and learns about the world around him.

The various interrelated aspects of the child's development—size, physical strength, intellectual curiosity, social skills, emotional strength, and self-confidence—enable him to explore his environment, to gain some control over it, and to make some generalizations about it (44: 150). Most children expect to grow from little to big, to learn, to be liked and wanted, and to be accepted for what they are.

Some of the important characteristics of children from 3 to 6 and their implications for the teacher and school follow:

Characteristics	*Implications*
Have own individual sets of physical characteristics, such as body build, rate of growth, and color of hair and eyes	Respect each child's uniqueness; consider his physical assets, skills, and limitations in planning with and for him
Vary widely in their energy output	Help individual childen use their energy to grow and to create; expect children to differ in their active play and rest requirement
Are establishing handedness	Encourage the child, when the preferred hand is determined, by providing conditions which encourage the use of the preferred hand in such things as handling tools, paintbrushes, drinking glass, and silver
Have uneven and fluctuating patterns of growth, including uneven muscular development; thus children lack coordination, are awkward, and tire quickly	Provide a flexible program of activities geared to individual development, such as walking, climbing, jumping, running, pulling, skipping, engaging in rhythms, using appropriately complex manipulative materials, using large equipment, modeling, painting, looking at books, resting—providing a balance between active and relaxing activities
Have individual requirements for food, rest, and activity	Observe children for signs of fatigue and dietary deficiency; provide for these needs and help children and the parent to understand them
Are still developing eye and eye-hand coordination and control	Be aware that eye-hand coordination is developing slowly, and that vertical eye-hand coordination precedes the horizontal; be alert to the child's inability to judge distance and speed when riding tricycles and playing on equipment or with balls, and guide individuals accordingly
Tend to use their whole bodies in learning new skills—squirm, twist, and stretch different parts of the body	Anticipate quick fatigue; understand that genuine experiences utilize the efforts of the total organism—mental and physical—and that experiences normally tend to be integrated
Are very susceptible to infectious diseases	Be alert to indications of illness and the need for isolation, medical care, and the attention of the parent
Vary in their elimination control, habits, and attitudes toward elimination	Understand the strain which many nursery school and some kindergarten children experience, make every effort to remove fears and uncertainties, and assist children in an objective and ac-

	cepting manner to adjust to and become comfortable in using school facilities, and in establishing their own bodily rhythms
Seem to prefer children of their own sex	Provide for play with peers, such as housekeeping and roadbuilding, for learning appropriate sex roles
Fluctuate in their individual patterns of social growth and will regress at times	Encourage the child to enter and withdraw from groups at will, to relate present tasks and experiences with later ones, to repeat an experience as needed, and to learn to cooperate with individuals and groups
Are forming images of themselves as persons	Help each child appreciate his own uniqueness; help him see himself as a person who is growing and learning through his successes and his failures
Are learning to accept and give affection, a basic need of children	Provide the climate of warm relationships needed by children for emotional growth
Are learning rapidly about their environment and people	Provide for concept building through seeing, touching, smelling, tasting, hearing, talking; for exploring, inquiring, manipulating, creating; for experiences with people, literature, materials, and meaningful symbols in their environment
Are moving from talking largely in monologs, repeating sounds and words many times, to the level where they communicate with language using a sizable vocabulary and expressing themselves in thought units	Provide opportunities for them to develop language power in all phases of the day's program
Are showing an increasing ability to note relations among objects (what they are made of, what can be done with them); to make simple deductions within the limits of their experience; to judge distances; are developing concepts of space, form, size, time, and distance	Provide opportunities for them to develop concepts through firsthand experiences with objects, persons, places, and situations
Are growing continuously, growth taking place in orderly though uneven stages of development; no year stands alone—each is a part of an ongoing and ever more complex stage of growth (38:59)	Provide a program for each child which grows out of his past experiences and relates to those which follow; view the program in a long-range perspective, not in segments, and enable children to pursue interests on more complex and coordinated levels

Bureau of Publications, Baltimore, Md., Public Schools

With teacher guidance, a child develops an early interest in books as he realizes that printed words carry meaning.

Have a natural urge to be active because their bodies are constantly producing and using energy in the processes of growth	Provide space and equipment for active movement indoors and out, for small and large muscle activities, for intellectual tasks, and for proper food and rest to replenish depleted energy
Want to learn and grow; have within them unfolding patterns of growth and thus a characteristic tendency to function adequately, yet they vary in their potentials, pace, interests and ways of learning (31:3)	Provide optimum conditions—a laboratory indoors and out—for exploring and discovering; for satisfying children's urges to wonder, discover, and create; and for thinking and solving problems

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The Teacher

The most essential requirement for a good educational program for young children is professional guidance and leadership. This calls for qualified teachers who have broad academic backgrounds, desirable personal qualities, keen insights, and professional competencies.

Characteristics and Qualifications.—The good nursery school or kindergarten teacher possesses personal qualities and competencies which enable her to promote positive relationships and work well with young children and adults. The effective teacher—

- Likes and respects young children
- Enjoys working with children and their parents
- Maintains warm, friendly relationships with children and parents
- Is calm, sensitive, thoughtful of others, and has a genuine sense of humor
- Understands how young children grow, think, behave, and learn
- Values each phase of the child's growth and accepts him where he is in his development
- Is sensitive to the growth and learning needs of the individual child and helps him move forward according to his own rate and level of development
- Values the process of learning through which children develop independence, resourcefulness, creativity, responsibility, and the ability to solve problems
- Maintains warm relationships with other members of the staff, thus fostering a healthy emotional environment for children and their parents
- Is skilled in observing children; watches and listens for clues to their needs and understandings, a habit which characterizes her entire approach to learning; supports and extends children's efforts, answering questions and guiding play so that it challenges their capacities according to their readiness for certain kinds of experiences (50: 125); and plans and modifies the program according to the needs of an individual child and the group
- Keeps cumulative records of significant aspects of the child's development which are helpful to those persons who are responsible for continuing his guidance
- Recognizes children who are excessively shy and timid, those who are aggressive and belligerent, those whose nutrition is poor, those who have serious defects, and those whose cultural background is limited or different; seeks professional assistance and makes suitable provisions for them
- Exerts the kind of guidance, at times direct, which helps the child toward increasing self-direction and self-control
- Knows and makes use of the resources of the community, both human and material, in providing rich learning experiences for children
- Appreciates the importance of parent-child relationships as crucial to the child's growth and of parent-school relationships as a means of fur-

thering it; uses her insights and skills in communicating with parents in a variety of ways, both in individual and group situations.

Professional Preparation.—Preparation for teaching in the nursery school or kindergarten is a special kind of training, with emphasis on developmental learning and a background of understanding of children and the entire program of early childhood or elementary education. The qualified teacher should be a graduate of an accredited 4-year college with major work in early elementary education, completed either at the graduate or postgraduate level. Her professional preparation in this field should include courses to develop basic understandings of—

- Human growth, development and learning, mental and physical development, health, and nutrition
- School, parent, home, and community relationships
- Curriculum content, methods, materials and equipment, experiences, and resources
- Current problems, history, and philosophy of education
- The administration and organization of schools (23).

She should continue her professional growth through attending professional courses, conferences, workshops, or seminars; and participate in research and program development. She should maintain her certification status with her State department of education.

Goals

The educational program for young children is focused on furthering the full development of each child and the successful functioning of groups of children (35:17). More specifically the purposes and values are to help children—

- Become aware of their physical needs; learn healthful habits of play, rest, elimination, and eating; build coordination, strength, and physical skills; and develop sound mental and physical health
- Gain some understanding of their social world; learn to work and play fairly and happily in it; and grow in developing responsibility and independence, yet accept the limits present in living in a democratic society
- Acquire interests, attitudes, and values which aid them in becoming secure and positive in their relationships with involving their peers and adults outside the home
- Grow into an ever-deeper sense of accomplishment and self-esteem
- Grow in their understanding of their natural environment
- Gain some understandings of spatial and number relationships

- Enjoy their literary and musical heritage
- Express their thoughts and feelings more creatively through language, movement, art, and music
- Develop more appropriate behavior, skills, and understandings on which their continuing education builds
- Observe, experiment, discover, think, and generalize at their individual levels of experience and development.

The teacher works toward such goals in two ways. She develops with and for each child his own curriculum and provides "the total group a taste of the intellectual and artistic fruits of the culture." (5:55) She structures the day in such a way as to provide flexibility in meeting current interests of children, yet within a broad framework which provides for enough regularity to give children a sense of direction and understanding of what they can depend upon. The organization, however, "can only provide a setting for something far more important. The key lies in the quality of guidance and support by adults who live and work with children." (50:140)

Guidelines in Planning the Day

Nursery and kindergarten programs differ because of the differences in development and experiences of the children to be served. As children grow older—from 3 to 4 and 5—their activities tend to become sustained over a longer period of time, some of the materials and larger equipment tend to be more complex and varied, and learnings tend to grow in depth and scope as the children become more mature in their physical, social, and intellectual development. Corresponding adjustments are made in the structure of the child's day, and in attention to physical and personal care and to parent education. Although the teacher's guidance continues to be geared to the individual child, more group activity and larger class groups may be found in kindergartens than in nursery schools.

Guidelines, such as those suggested by Leavitt (27:105), are helpful to teachers in planning their programs to secure balance and variety in the child's day:

1. The physical needs of children are the basis of the framework: a balance of activity and rest; provision for bodily rhythms, for hunger, thirst, elimination, and washing needs; daily and seasonal protection from exposure.
2. Activities—such as discussions, taking trips, seeing films, singing, engaging in rhythms and movement, painting, dramatic play, building and constructing, observing and experimenting, using equipment and materials,

and listening to recordings and stories—are spaced with daily variations to provide a balance of rest and activity and to provide for the current and ongoing interest of children and the teacher's long-range plans.

3. Variations in individual children's bodily rhythms are observed in guiding their work, play, and rest.
4. Outdoor activities are scheduled for optimum sunshine and weather conditions.
5. A long work-play period provides for fluctuating interests and individual needs, both current and long-range.

The work-play period becomes the heart of the day's program and the teacher's strategic method. Leavitt cautions that, "Always the teacher must be alert to too long sitting, too long running, too high-pitched and overstimulating a program, too suppressed and quiet, long boring waits, and deadly impoverished content." (27:105)

The daily programs provide for indoor and outdoor work and play, toileting and washing hands, rest, snack, inspection, group discussion, stories and music, arrival and departure. Sessions are divided into blocks of approximate time in order to encourage initiative and self-help both in play and in the activities of toileting, eating, and resting. Two periods are usually planned for work and play, the first perhaps about an hour, the second one probably shorter. The times devoted primarily to music and rhythms, group discussion, and stories tend to be shorter.

The two half-day programs which follow, one for nursery school and one for kindergarten, are suggestive of planning for the day's activities. Plans, however, vary among teachers and schools.

A Nursery School Day

The following sequence of activities may occur in a nursery school for fifteen to eighteen 3- and 4-year-olds with 2 teachers during a 2½-to 3-hour session.

Arrival

As each child arrives, he is greeted by a teacher and assisted with outside clothing. The nurse or one of the teachers observes the child for any indication of illness. The other teacher may be in the yard to supervise outdoor play.

Work Play

Children in ones, twos, and threes may choose activities in indoor and outdoor play areas. They may, for example, use hollow blocks for barnyards, tracks for trains, and roads and bridges for cars and trucks. A few of the children at this stage may only discover how to stack blocks and reassemble them. Some may experiment with sounds, rhythms, and melodies using various materials or simple musical instruments.

Dramatic play through housekeeping, building with blocks, or "marketing" affords opportunities for fostering language and for gaining concepts

about the roles and work of people the children are learning to know. They may talk about experiences and try out ways to solve problems encountered in their play. Some may play alone or beside another child in parallel play as they "rehearse" words and ideas; others may engage in cooperative play. At times they may look at a few interesting books in the library area or watch pets or other animals and specimens in a science or nature center.

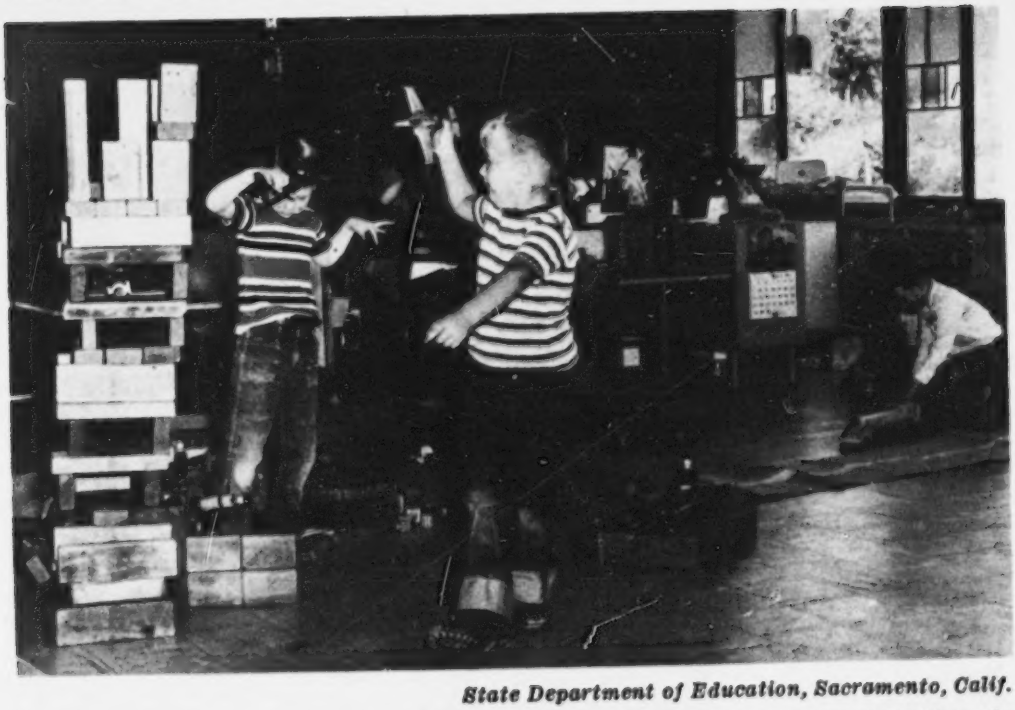
They may explore with color at easels, indoors and out of doors, and work with finger paints and clay—some punching and pounding it, others creating forms. Each child is made to feel successful in at least some of his undertakings.

Children's Bureau, U.S. Department of Health, Education, and Welfare

Children express their ideas and feelings creatively with finger and tempera paints.

Outside they may also climb jungle gyms; walk boxes, boards, and tree trunks; and run and jump. A few may go on a walk with one of the teachers to some point of interest, dig in the ground, or play with water, floating boats, pouring water through funnels, and blowing bubbles. Others may work in the garden digging and planting. They also stroke, feed, and care for pets and watch them care for their young.

It is the skill of the teacher in guiding the individual child that makes these experiences educative. For example, she decides whether to suggest



State Department of Education, Sacramento, Calif.

Children discover how to stack and reassemble blocks as they express their ideas in construction.

including another child or additional materials in an activity, or to comment or ask a question at a given time. She anticipates the conclusion of an activity before it disintegrates and ends in an unsatisfactory experience. She provides time and guidance as needed in putting away materials and cleaning up play areas.

The child goes to the toilet, washes his hands, and gets a drink of water whenever he needs to.

Midmorning Lunch and Rest

To provide a change in tempo and activity, children, a few at a time, are reminded to stop and put away their work, to wash their hands, and to sit at a small table with a teacher for a light lunch of fruit juice or milk and a cracker, cookie, or fruit. It is a time for a relaxed social situation, conversation, and self-service. Either rest on cots or a quiet time for music and stories may follow. A full day's session calls for rest on a cot with the room darkened.

Continued Activities

Children may resume the same or new interests. Some continue dramatic play, painting, or building indoors; others may go on a field trip to some point of interest in the community; while others may participate in music, story, poetry, rhythmic activities, or short small-group discussions with one of the teachers.

Departure

When departing, each child needs some attention or recognition from a teacher and a friendly goodby. An occasional sharing of some incident of interest with the mother who has called for the child is appreciated.

Pueblo, Colo., Public Schools

Children establish good health habits in drinking, toileting, and washing hands.

A Kindergarten Day

The following program is illustrative of a 2½- to 3-hour kindergarten day for 20 to 25 5-year-olds with 1 teacher. Although the sequence may vary, the following activities usually occur.

Arrival, Greetings, Sharing

Children arrive and are informally greeted by the teacher who observes them for possible symptoms of illness and infection. They greet one another, share things of interest, and exchange news and happenings of special importance.

Planning Work To Be Done

Individual and group plans are made for the work-play period. The teacher helps each child as needed make the decision for his work, although planning continues throughout the work period.

Work-Play

An indoor and an outdoor work-play period during the day are provided in many kindergartens. In some instances they are combined. Each child selects his activity and moves freely from one to another. He may work alone or with a small group. Activities are varied and the length of time for them is flexible.

Children work with blocks and accessory toys; with lumber and tools; with games, puzzles, and books; with paints, clay, and crayons; in the housekeeping and other work areas in dramatic play; and with sand and water play. They experiment with prisms, magnets, and other science materials, with letters and numerals at the feltboard; and they work at gardening or exploring the outdoor environment, and play with toys and equipment.

The teacher observes each child and notes concepts being expressed in work and play, particularly those needing clarification and extension. She provides experiences for more information, makes suggestions, raises questions, mentions additional materials, and gives appropriate guidance in tension-arising situations. Observations in such situations aid the teacher in rearranging the environment and in anticipating appropriate experiences for individual children.

Clean Up and Put Away Materials

Adequate time is provided for the children to return materials to their proper places. The teacher gives assistance where needed. Children may help one another. Competence and appreciation is developed as well as a sense of responsibility and pride for the appearance of the room and for the materials and equipment used. Following the cleanup, as well as at several other times during the day, children use the bathroom and wash their hands.

Group Experiences

Children, usually seated on the floor in groups, discuss with the teacher questions which may have arisen from their work, such as, "What is glass made of?" or "What are the best kinds of wood to use in making a boat?" Further discussion may lead to questions like, "Where can we get more information and how can we use it?" Such questions lead to trips and further observations. The children may admire the work of a child or a group. Ideas are explored and expressed in a social setting through the means of language, pictures, objects, or creative activities which evolve from short trips, interviews, science experiences, stories, or news.

Midmorning or Midafternoon Snack and Rest

Following their active play, children look forward to a "pickup" of juice, fruit, or milk, and to rest and relaxation. The snacktime provides a social situation as well as an opportunity to promote good health habits where children, with their peers, acquire approved social habits and have time to relax and converse together.

Continuing Work-Play Activities (indoor or outdoor, preferably outdoor)

Outdoor periods give children many opportunities to use and develop their muscles and to use their energies purposefully through running, jumping, climbing, lifting, pushing, and pulling. The equipment is varied and challenging and also stimulates imaginative play. It includes climbing

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Children's Bureau, U.S. Department of Health, Education, and Welfare

Children learn about plants as they plant something of their own and watch it grow from day to day.

equipment such as parallel bars and turning bars; outdoor building equipment such as hollow blocks, playboards, kegs, packing boxes, sawhorses, and and walking boards; locomotor equipment such as wagons, tricycles, and sleds; and sandboxes and accessories such as sieves, molds, pots, cans, wooden spoons, funnels, and boards. (40: 75)

On most days, many work-play activities such as singing and enjoying stories, painting and clay modeling, looking at books, and playing with water lend themselves to quiet activity and experimentation outdoors.

Group Experiences

This is a time of day when children may get together before dismissal for a story, poem, or music, or for sharing the pleasures and accomplishments of the day. They may listen to a special record, plan a trip, talk about a discovery, sing a favorite song, or enjoy a story.

Dismissal

Some children still need help with zippers, buttons, or galoshes. The teacher bids each child goodby as he departs to be picked up or to walk home.

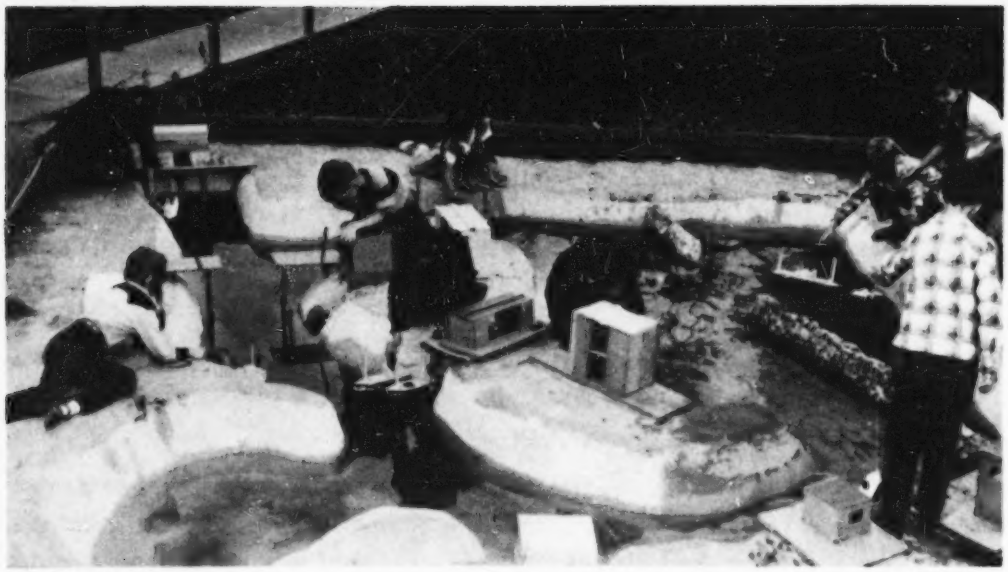
Kindergarten and nursery school programs provide for large blocks of time for play—individual and group. This is an important means for learning and development. Play is work for the young child. Its significance is made clear by Lawrence Frank when he points out that, through play, the child—

> . . . continually rehearses, practices, and endlessly explores and manipulates whatever he can manage to transform imaginatively into equivalents of the adult world. He experiments with and tries to establish the meaning and use of a variety of symbols, especially language, as he tries to cope with this often perplexing grownup world. In his imaginative use of play . . . he creates one amenable to his strength, skills, and understanding. Through verbal play he tries the varied combination of words and phrases, discovering and mastering the meaning of these verbal symbols and practicing communicating both verbal and nonverbal (16 : 5).

Curriculum Experiences

The curriculum is vital. The experiences it offers children are based on knowledge of their physical, social, emotional, and intellectual needs, the structure of knowledge, and on sound curriculum developments. These experiences come about through the day-by-day and long-range plans of the sensitive teacher.

Through the child's daily work and play and teacher-led experiences, such as discussions and demonstrations, and literature and group music, good schools provide for activities which draw from all curriculum areas: social studies, science, language arts, number relationships, health and physical education, and the arts. No experience lies in one of these areas alone; each involves two or more, and the learnings are interrelated and interdependent.



State Department of Education, Sacramento, Calif.

With guidance, children learn about the work of other people through water play activities.

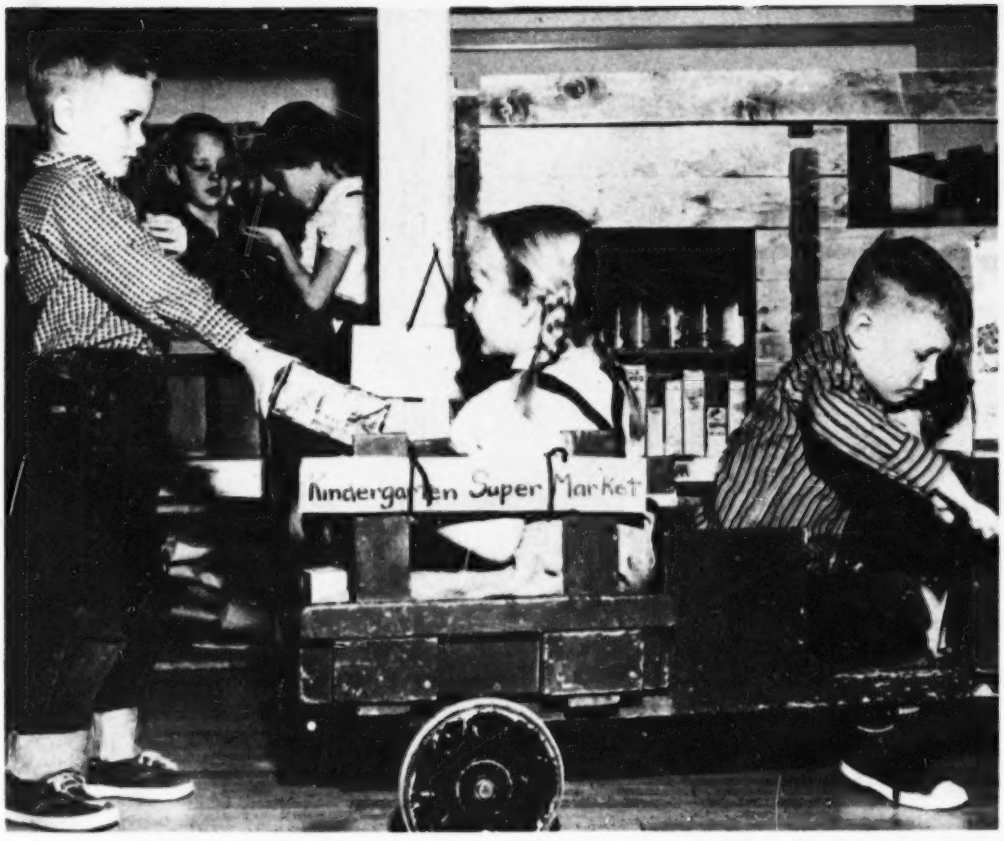
The discussion which follows identifies, for the purpose of presentation only, some of the kinds of experiences which the young child's curriculum provides.

Social Studies.—Learnings and experiences in the area of social studies comprise a major phase of the nursery-kindergarten program. These include, first, learning some of the skills and attitudes of working and playing with one another and, second, acquiring concepts about how people in their homes, communities, and their expanding world live and work. Such accomplishments need to be viewed in terms of the child's maturity and his long-range development. For example, the child works for a number of years to learn to "take and share responsibility" (39:15) or to understand such concepts as buying and selling. Therefore, his curriculum should provide for continuous stages of understanding and skill.

The size of the group, the space indoors and outside, the variety and acccessibility of materials and other resources should be such that every child with a good teacher has adequate guidance and opportunities for varied firsthand experiences in:

Working and playing

- Work and play alone, beside another child, and cooperatively with other children as they learn how to live in a world of people
- Share and take turns, yet maintain their own rights and property
- Take and share responsibilities in planning and taking trips or other activities; playing games; cleaning up; caring for materials, plants, and tools



Greeley, Colo., Public Schools

Children begin to understand buying and selling and the use of money as they engage in dramatic play.

Laboratory School, State College of Education, Greeley, Colo.

A trip to observe animals is an educational experience.

National Education Association, Washington, D.C.

Opportunities are provided for learning to give and to receive help.

- Participate in setting and observing standards for living together, in evaluating work, and in observing limits set by adults—the teacher, fireman, traffic officer
- Listen to and observe simple instructions
- Become more independent in establishing routines in working, playing, sleeping, washing, eating, and toileting
- Engage in activities throughout the day through which they develop self-control, self-esteem, and independence—sharing, yet holding their own, contributing ideas, and accepting those of others
- Engage in dramatic play through which they gain further understanding of the roles and work of people—their parents, the doctor, nurse, fireman, farmer, grocer, pilot, astronaut—and of processes—buying, selling, building, weaving, and baking
- Learn to understand and value cultural and other differences among children in their groups as a basis for growth in human relations
- Develop a positive self-concept—through experiencing support, respect, approval, reasonable success, and learning to handle some failures.

Observing and exploring the environment

- Observe workers in the community to learn how they perform their work
- Explore the immediate environment, observe some of its aspects, and form concepts from experiences with mud, soil, streams, slopes, plants, rain, shadows, roads and streets, and homes and shops
- Experiment with materials, see possibilities in them, and learn some of their characteristics; discover what one can and cannot do with material such as wood, metal, cloth, and paper.

Gaining information

- Talk with people who work in the school—the engineer or custodian, principal, secretary, dietitian, nurse, or other resource persons
- Invite people of different nationalities and ethnic backgrounds to visit the class
- Discriminate and learn through their senses—by seeing, hearing, touching, tasting, and smelling
- Decide upon information desired and request it from other appropriate individuals—the farmer, dentist, postman, traveler, or engineer
- Use books, pictures, films, and exhibits for information about boats, airplanes, farm and other animals, rockets, and peoples at home and in other lands
- Listen to stories, brief descriptions, and explanations
- Discuss and share observations, experiences, and ideas
- Use simple globes and maps.

Observing special occasions such as holiday seasons, and current happenings of interest to young children

- Paint, dramatize, sing, listen to stories, and view films and pictures pertaining to heroes and happenings surrounding them which have significance for individual children or groups
- Participate in seasonal celebrations
- Enjoy and appreciate patriotic music and literature.

Organizing ideas and understandings

- Build and construct airports, grocery stores, post offices, firehouses, and launching pads
- Paint pictures and make models representing their ideas
- Express feelings and ideas through dramatic play, music, and dances
- Discuss plans, trips, experiments, and other experiences
- Make books of picture clippings, or children's own drawings and murals, with suitable titles and captions on topics of interest
- Make floor "maps" of immediate area.

State Department of Education, Sacramento, Calif.

Films expand children's knowledge and satisfy their curiosity.

Science.—Science is learned best by young children when it comes through the experiences of the senses, simple experiments, enriched materials, and exciting discussions. From their earliest years, young children have a wide variety of science experiences. They are eager to gather information about the physical and biological world. The teacher must explore the adequacy of this information and know where each child is in his thinking, to help him extend his knowledge and make it more meaningful. The child needs help in sorting out the great variety of information and experience available to him. He needs ways of relating it meaningfully to his own experiences and of opening doors to further insight into the ideas involved as he tries to understand and interpret the world around him (50:104). He takes from each experience as much as his background and understanding will permit.

The teacher needs to be familiar with both science content and teaching techniques to enable her to capitalize upon the child's needs and interests, to utilize community resources effectively, and to plan stim-

ulating and appropriate science activities that will extend the child's understandings by providing him ample opportunity to observe, question, explore, and experiment (8:218).

Children have experience in science as they begin to understand more about the physical and biological aspects of the world around them.

- *Explore their environment* in such activities as going on trips around the school and into the community; collecting bulbs, seeds, leaves, pods, stones, and shells and sorting them; observing and discovering various changes in the environment, changes in weather and seasons and some of their effects upon plants and animals; experimenting with soil and water; observing such types of life as fish, amphibians, reptiles, birds, and mammals
- *Work with animals and plants* in such activities as caring for pets and growing plants; learning about different kinds of common plants—their names, where they grow, and what they need to live and grow; observing and talking about animals—how they move, how and what they eat, what sounds they make, where they live, how they sleep, how they produce and care for their young, and how they see, smell, and hear
- *React to physical phenomena* in such activities as experimenting with friction, magnetism, static electricity, momentum and inertia; melting and boiling, evaporation, condensation, and freezing; observing fog and clouds, ice, snow, rain; discovering things that do and do not float, that are heavy and light

Montgomery County, Md., Public Schools

We look at our shadows in the morning. Will they be the same at noon and in the late afternoon?

State Department of Education, Sacramento, Calif.

Experimenting helps children grow in their ability to get information and to find answers to problems.

- *Learn about simple machines and how to use them* by experimenting with toys; observing derricks, steam shovels, cement mixers, locomotives, operations using pulleys such as raising and lowering the flag; using tools such as hammers, saws, pliers, shovels, and hoes
- *Use equipment to further explore the immediate environment* by examining with a hand lens such materials as clothing, soil, insects, parts of plants, common household materials; experimenting with prisms to refract light, and thermometers to observe the rise and fall of the column of mercury or alcohol.

Bureau of Publications, Baltimore, Md., Public Schools

Concentrated interest is apparent as children observe, wonder, and question to extend their knowledge.

Language Arts.—The child's language development has been shown by research to be an aspect of his total growth. Language is therefore a highly individual matter which has personal meaning for each child. It is facilitated by his interactions with his own physical and social environment. The teacher in helping the child acquire language power provides for a variety of sensory and verbal experiences which foster concept and vocabulary development. She also provides a climate and the kinds of guidance which encourage communication among children. In addition, she arranges situations so that "children with limited power over language will have many opportunities to make distinctions, classify, and generalize about experiences meaningful to them." (8:224)

Through these beginnings language becomes a tool of thought and effective communication. It develops in situations where children feel a need to express themselves and seek to be understood. Children have many experiences throughout the day in—

Listening

- **Appreciate and become sensitive to such sounds about them as the rustle of leaves, whistles, sirens, wheels, splashing of water, songs of birds, tones of musical instruments, and the beauty of words and phrases**

Bureau of Publications, Baltimore, Md., Public Schools

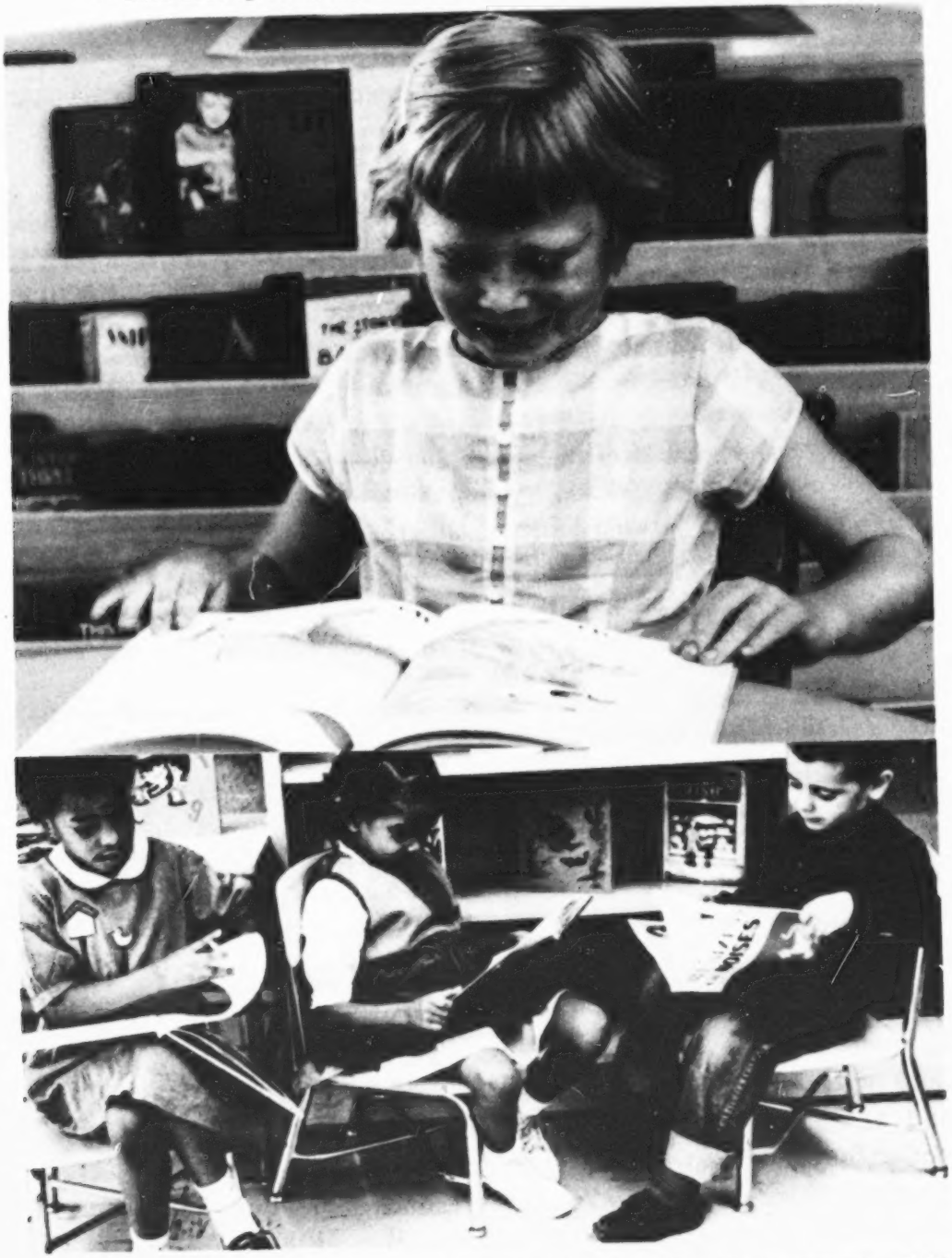
Children identify themselves with story characters of literature through dramatic play with puppets.

- Become aware of new and interesting words and make them a part of a more meaningful and precise vocabulary
- Listen and interpret the words and tones of voices of those around them
- Develop power in discriminating between language patterns and the sounds of words and word parts
- Listen appreciatively and respond in a variety of ways to stories, poetry, chants, and rhymes
- Listen thoughtfully to discussions, descriptions, explanations, and directions
- Listen critically to ideas presented to them.

Speaking

- Experiment with language and become more confident in its use, repeating words, trying out new ones, and enjoying using them
- Learn names that apply to their observations and experiences
- Clarify ideas and generalizations through verbalizing them
- Take part in the interchange of ideas through informal conversation with peers in work and play

- Learn to talk easily and spontaneously with adults
- Express themselves in dramatic play, simple puppetry, storytelling, poems, chants, and jingles
- Give descriptions, explanations, and accounts of happenings



State Department of Education, Sacramento, Calif.

Picture and story books have meaning for children even before they learn to read.

- Participate in making plans, evaluating work, and engaging in discussions as a way to begin to solve problems
- Dictate captions, titles, lists, stories, records of observations and happenings, letters, and notes which serve the functional purposes of a child or the group
- Compose poems, rhymes, and songs
- Acquire desirable oral language habits of usage, enunciation, pronunciation, and voice quality.

Acquiring meanings through materials and media

- Observe and respond to characteristics of the environment; note details of objects, materials, and physical surroundings
- Use mass media such as pictures, films, illustrations, or other representations for both information and enjoyment
- Enjoy looking at picture books; learn about books and how to use and care for them
- Gain some understanding that printed words carry meaning
- Choose books from the library and library corner to secure data or to enjoy according to the child's purposes and maturity
- Develop a personal interest and wholesome anticipation concerning reading; use reading ability informally as appropriate.

Producing symbols to carry meaning

- Communicate ideas through drawing, painting, constructing, scribbling, marking directions and signs
- Print names, numbers, and labels as needed and appropriate for different individuals.

These kinds of language experiences are basic in their own right in thinking, communicating, and developing appreciations. Functional activities are logical approaches to more systematic forms of listening, speaking, reading, and writing which will follow according to each child's maturity and readiness for them.

Number Relationships.—Young children are constantly dealing with number and measure in their daily living at home and at school. In many of their activities they use numbers as they encounter problems of how much and how many, how big and how small, how fast and how slow. Children vary widely in the extent to which they understand the mathematics they use as they engage in activities. Through their experiences, children acquire in varying degrees concepts of things in space and their relationship to them, concepts relating to size, quantity, shape, distance, speed, temperature, time, weight,

University School, Bloomington, Ind.

Children begin to understand and make use of tools of measurement as they determine how many cups are needed to fill a container.

Teachers need to be alert to the number needs of children as they help them build onto the understandings they already have, and extend these concepts and learning through concrete and meaningful experiences. Children should be helped to reason as they solve mathematical problems and guided to clarify concepts and related ideas.

Children acquire *mathematical understandings* in varying degrees as opportunities are provided to—

- Count objects and people
- Tell their age, house and telephone number, and number of people in

Aurora, Colo., Public Schools

Puzzles offer children opportunities to acquire concepts of size, shape, and space.

- Use money in buying their lunch, milk and crackers; going on trips and making purchases
- Discover that two halves of an object make one whole
- Learn the use of numerals on clocks, calendars, measuring cups, rulers, and scales
- Discover that coins have different values
- Understand that the time of day is indicated by the position of the hands on the clock
- Recognize the position of the hands of the clock as they relate to times for daily activities, such as work, lunch, cleanup, rest, and time to go home

Bureau of Publications, Baltimore, Md., Public Schools

An interest corner with counters, spools, beads, pegboard, and a clockface help children learn the meaning and use of numbers.

- Learn that the day is divided into parts which always occur in regular sequence: morning, noon, afternoon, and night
- Observe the variations and relationships in sizes and shapes of objects, such as big, little, wide, narrow, round, square, wedgeshaped, or rectangular; compare sizes and shapes
- Make use of simple tools of measurement, such as cup, pint or quart measure, teaspoon, tablespoon, ruler, yardstick, and scale
- Keep approximate time record of experiments, happenings, and observations
- Discover the use of scales and the concept of pound
- Understand that the calendar is used to indicate days of the week and months of the year
- Estimate the space needed for an activity
- Recognize small groups or sets of objects (3 blocks, 4 children, 2 cookies, or 5 pennies)
- Determine if one set is more or less than another (2 pennies are less than 4 pennies: 5 crayons are more than 3 crayons)

- Match two sets of objects one to one (2 milk containers to 2 children, 3 paint brushes to 3 jars, 4 chairs to 4 children)
- Determine what is missing or how many are needed (size of block to balance a design; straws for milk bottles).

Health and Physical Education.—Children's daily experiences should foster their health and safety. Certain factors contribute to the building of sound physical and mental health, such as a safe and healthful environment in the day's activities, opportunities for suitable and joyful play, and a school program which recognizes differences among children and facilitates mental and physical health. A supporting environment and skillful guidance encourage children to develop healthful and safe practices and desirable habits and attitudes toward cleanliness, grooming, play, rest, food, and bodily functions. In their early years, children gain some understandings of these; they grow in physical skills, strength, and coordination; and they develop a healthy and realistic concept of self and others. An effective program provides experiences for—

Developing healthful practices, understandings, and attitudes

- Play outdoors daily when the weather permits
- Practice healthful personal habits, such as washing hands before eating and after using the toilet, using clean tissues or handkerchiefs, covering the mouth when sneezing or coughing, using a napkin, and wearing suitable clothing
- Rest or relax on cots or rugs according to individual needs and during quiet activities
- Learn to play fairly
- Eat nourishing lunches, snacks, or midday meals made available as an important aspect of the program
- Learn good posture for walking, running, sitting, standing, and lying down
- Acquire positive feelings toward the physician, dentist, nurse, and community health service through firsthand experiences, dramatic play, and other teaching-learning situations.

Developing physical skill, strength, and balance

- Participate in and enjoy active play indoors and out of doors
- Engage in such motor activities as running, skipping, hopping, jumping, climbing, lifting, sliding, pushing, pulling, falling, and rolling
- Gain some skill in such basic activities as throwing, catching, bouncing and rolling a ball, suspending his weight from a horizontal bar or ladder, climbing on apparatus, and turning a somersault

Children's Bureau, U.S. Department of Health, Education, and Welfare

Life experiences offer opportunities for developing healthful habits and attitudes.

- Use movement creatively in expressing ideas and feelings
- Experiment with nonlocomotor movements; create movement patterns, such as bending and stretching, swinging and swaying, twisting and turning, and pushing and pulling. ...

Developing habits of safety

- Exercise judgment in indoor and outdoor work-play activities, such as using tools, equipment, and materials properly and safely
- Carry tools safely (point down)
- Put away blocks, toys, and tools after using them
- Understand and practice safe procedures in group activities, such as taking turns, judging distances, and observing needed space in games
- Discuss dangers to avoid, such as glass, wire, sharp edges, deep water, strange animals, and abandoned refrigerators
- Recognize situations involving hazards.

In addition to appropriate activities for young children, their total health program should provide for continuous health policies, provisions for emergency illnesses, and healthful and safe facilities and equipment.

State Department of Education, Sacramento, Calif.

Children enjoy purposeful play as they develop physical skills.

Music.—Music functions as a natural and spontaneous activity during the young child's day. It is a way for him to express many of his ideas, experiences, or moods creatively. He composes songs and chants related to his work and play because it gives him satisfaction. He likewise improvises rhythms and discovers satisfying tonal combinations as he works them out with various materials or instruments. He is inducted into his musical heritage through experiences in listening and actively participating in many of its forms. Children have experiences with music through—

Singing

- Sing in groups and individually
- Sing a variety of songs freely and spontaneously: lullabies and humorous, folk, action, seasonal, holiday, nursery, and creative songs
- Sing along with a record
- Sing with simple accompaniment or piano, autoharp, and other instruments

- Sing a familiar song as the teacher or an older child plays a second part on a flute, violin, or other orchestral instrument
- Create songs.

Listening

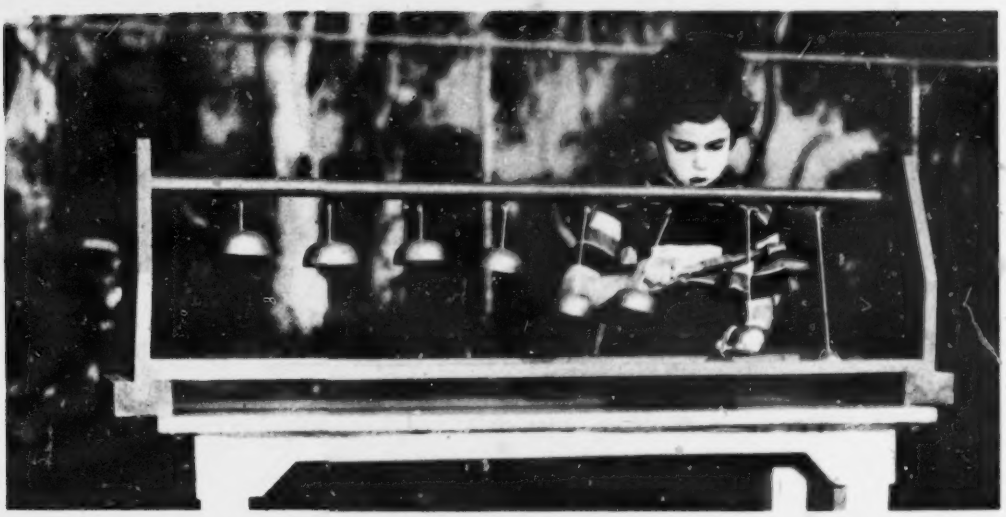
- Listen to a variety of music
- Listen for relaxation and for enjoyment
- Share records brought from home
- Select favorite records and play them on a record player
- Respond imaginatively to a story or a mood in a recording by singing, chanting, and pantomiming
- Listen to an adult or older child play an orchestral instrument; have opportunities to see and to push the valves.

Rhythmic activity

- Move freely to music
- Use imagination to respond to mood in music

State Department of Education, Sacramento, Calif.

Children like to experiment with the different sounds made by simple instruments.



State Department of Education, Sacramento, Calif.

Children discover various sounds and satisfying combinations as they experiment with the tonal scale.

- Respond to music with fundamental movements, such as walking, running, skipping, and sliding
- Use large muscles in rhythmic activities, such as sweeping, free movement in space unhampered by furniture
- Do rhythmic activities on the floor
- Respond creatively to fast and slow, heavy and light music, noting steady beat and accent.

Exploring and experimenting freely with rhythmic instruments

- Bells, triangles, cymbals, sticks, tambourines, maracas, sand blocks, a variety of drums; discover how sound is produced on each by striking, shaking, scraping, or tapping
- The particular sound made by each—likenesses and differences.

Choosing an appropriate instrument to accompany—

- A song
- A record
- Rhythmic activities
- A poem
- Dramatization.

Experimenting with melody instruments—piano, xylophone, resonator bells, and tuned bells—*and discovering* such things as—

- High and low
- Up and down
- Same tone
- Loud and soft
- Heavy and light.

Having many opportunities to—

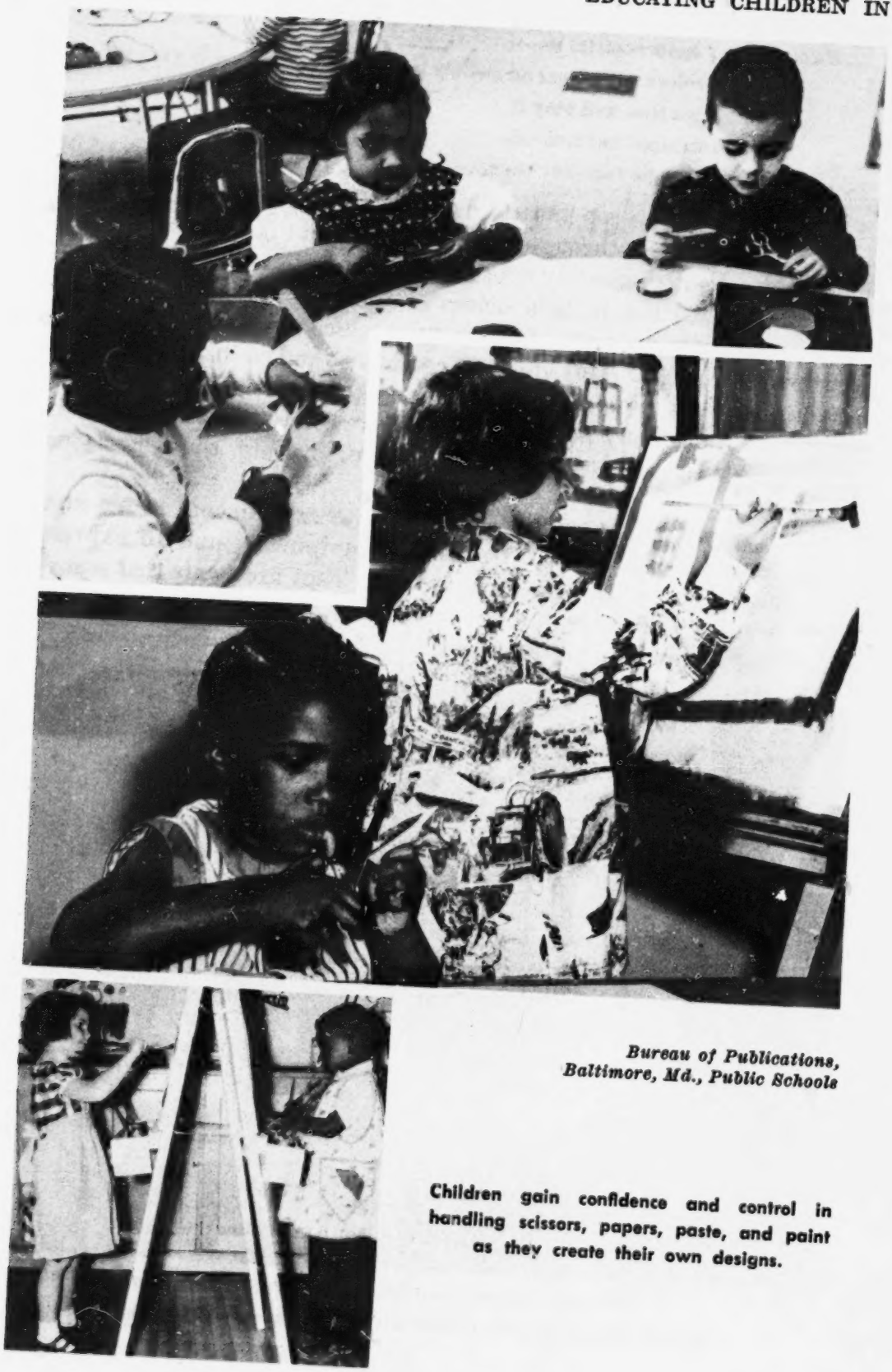
- Match voices with tones on melody instruments
- Make up a tune and play it
- Pluck stringed instruments
- Play a simple familiar tune.

Art.—"There is a deep natural desire on the part of young children to express themselves through art. Thoughts and feelings which perhaps they cannot adequately express with their limited vocabulary are eagerly splashed out in bold colors or squeezed out in clay. They can translate into art some of the feelings which are above and beyond their words. . . ." (27 : 146) and gain confidence and control in handling crayons, brushes, paints, clay, wood, and tools as they discover and experience their many possible uses. There comes the satisfaction of creating something on their own and of having their horizons widened.

Teachers make it possible for children to experiment; to see and enjoy beauty, forms, and textures; to manipulate; and to express what they imagine, know, and experience. They are aware that sensations from experience with artistic materials are the beginnings of a child's artistic productivity (5 : 74).

Children's Bureau, U.S. Department of Health, Education, and Welfare

There is satisfaction in discovering color combinations on their own.



Bureau of Publications, Baltimore, Md., Public Schools

Children gain confidence and control in handling scissors, papers, paste, and paint as they create their own designs.

Teachers provide these experiences through—

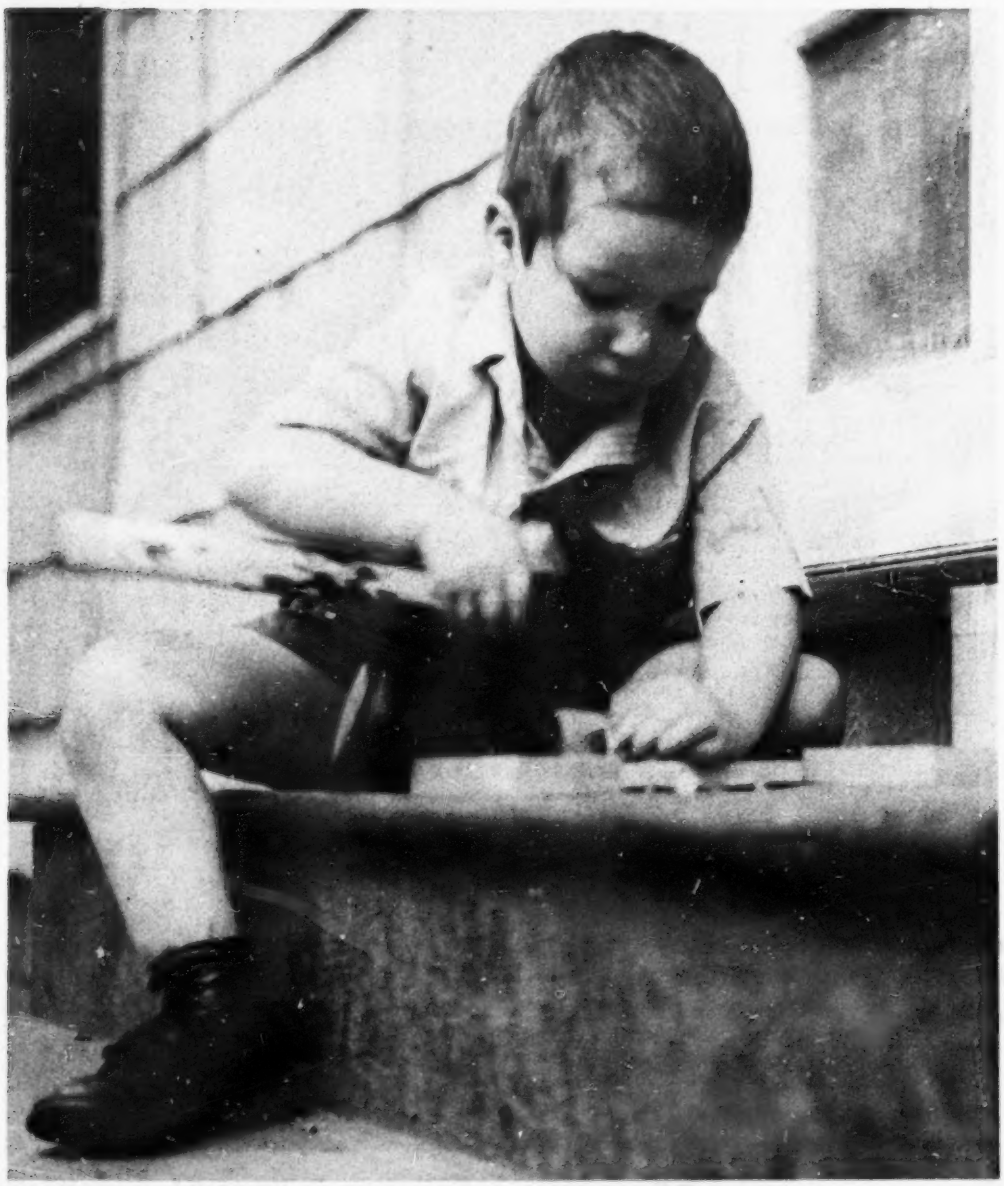
Painting and drawing

- Experiment freely with tempera and finger paints
- Mix and experiment with color, becoming more aware of it; make satisfying color choices

Bureau of Publications, Baltimore, Md., Public Schools

In constructing objects, children develop coordination and learn safe ways of using tools.

- Express their thoughts, ideas, and feelings creatively in ways which have meaning and interest for the individual child and which come from their experiences, such as making a mural after an interesting trip or listening to a story
- Experience joy in creating and interpreting their own work
- Enjoy the productions of other children in the group
- View and enjoy some of the work of famous artists.



Children's Bureau, U.S. Department of Health, Education, and Welfare

Young children build objects that have meaning for them.

Modeling and constructing with clay, dough, wet sand, and soap

- Pound, punch, squeeze, and shape the materials for the emotional and esthetic value of such activities
- Become aware of the textures and consistency of clay, sand, soap, and plasticine
- Shape and reshape objects for increasing levels of satisfaction and expression
- Learn what they can and cannot do with different materials
- Use manipulative toys in sandplay; later use accessory toys, such as trucks, trees, and animals.

Working with wood

- Discover some of the characteristics of woods—their color, texture, hardness, and suitability for certain purposes
- Experiment with sizes and shapes of materials
- Construct objects, toys, and models
- Gain skill and self-discipline in using tools, such as hammers, saws, pliers, nails, and sandpaper.

Using other materials

- Print repetitive designs with such objects as spools, leaves, bolts, and scraps of wood
- Plan and arrange pleasing furnishings for a center in the room or the playhouse
- Design and make original decorations for holidays or other special occasions
- Express ideas through carpentry and block building
- Select and use cloth for such purposes as upholstering play furniture, making tops for cars and trucks or sails for sailboats
- Make interesting and original collages from paste and scraps of paper, metal, wood, thread, and cloth.

Physical Environment

THE SCHOOL PLANT is regarded today as an educational tool. Careful planning and selection of the site, the type of building, the equipment, and materials are necessary to carry out the objectives of the program.

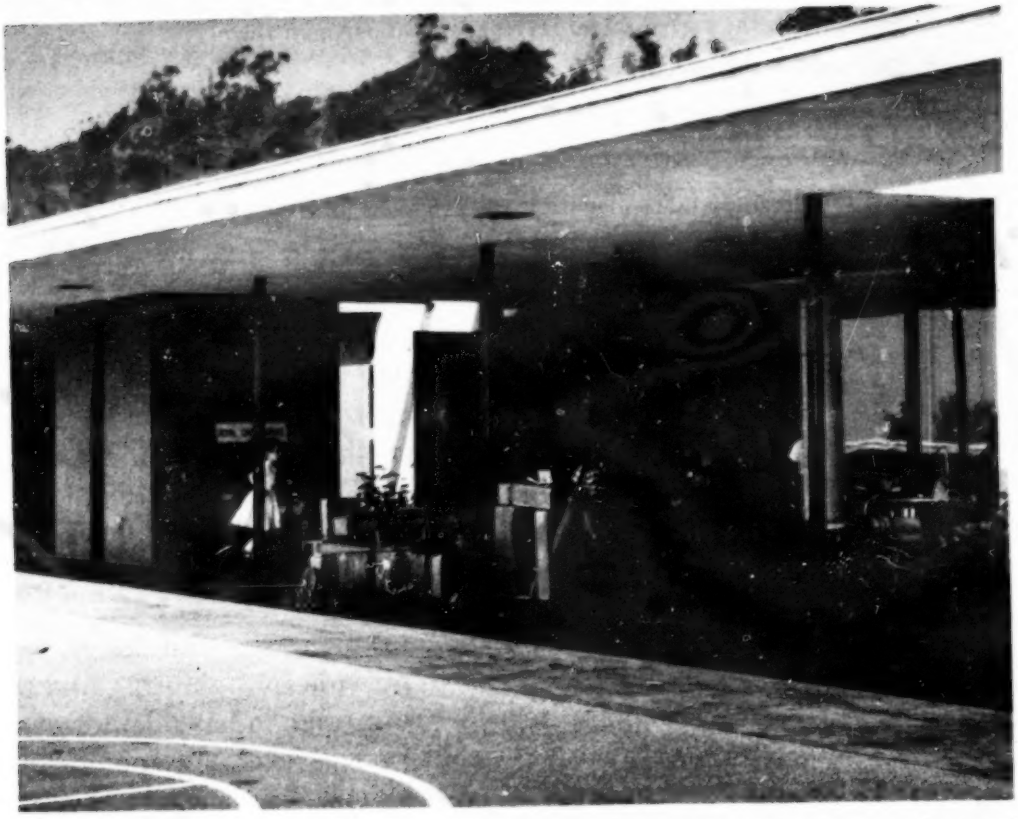
Nursery school and kindergarten children are active, vigorous, and curious about their environment. They learn from their peers and through concrete experiences. The space and facilities, therefore, should be adequate to "permit freedom of activity and provide for creativity on the part of the child. The selection of the site, the arrangement of the classroom, and the plantings in the outdoor area stimulate learning and interest in the child in the natural environment, as well as encourage him to contact his physical world (22:323)."

In providing the physical facilities, equipment, and materials, one should give careful consideration to the characteristics, needs, and maturity of the children and the relationship of the facilities to promoting health, safety, learning, and the total development of the children who will use them.

Location and Space

When contained in a school with older children, nursery schools and kindergartens are best housed and located on the ground floor. Quarters should be safe, attractive, well heated and lighted, ventilated, and sanitary. Preferably they should be located in a wing of a building or a separate unit. An exit to the play area should be provided, permitting a coordinated use of the indoor-outdoor spaces.

Young children need plenty of space in which to move about and to carry on their work-play activities. Recommended floor space indoors is 35 to 40 or more square feet per child; outdoor space, 75 to 100 square feet per child (7:37).



State Department of Education, Sacramento, Calif.

In appropriate climates an indoor-outdoor area provides an easily accessible work and play space.

Equipment and Materials

The types of experiences children may have in school are made possible by the way in which the teacher makes equipment, materials, and facilities available to the children (30: 27). The quality of their activities and interactions with one another is influenced by the arrangement of materials and equipment and by the way in which available space invites children to undertakings such as building, experimenting, observing, or engaging in music activities.

Since young children learn through their experiences, the materials and equipment need to be selected for the children who will use them. When well chosen they—

- **Provide for a variety of interests and uses**
- **Are safe, sturdy, durable, and strongly built to withstand vigorous use**
- **Encourage physical activity**
- **Foster imaginative and creative activity**
- **Are adaptable to many uses**

- Stimulate thinking, problem solving, and experimenting
- Facilitate communication of ideas
- Require manipulation
- Encourage construction
- Call for sharing and cooperation (37 : 16).

Indoor.—Indoor facilities for nursery schools and kindergartens are planned for the comfort, health, and convenience of children and staff. The plumbing facilities in the classroom—such as a sink and drinking fountain—should be conveniently located and the correct height for small children. The adjoining toilet rooms should have doors or screens for privacy. Attention should be given to floor materials and ventilation in these rooms. These facilities should be easily accessible to the classroom and to outside areas. One toilet and a low lavatory with an overhanging mirror for every eight children is generally recommended.

Furniture should be appropriate and suitable in size and design for young children. It should be movable to provide for flexibility and to enable children to participate in both group and independent work. Bulletin boards and chalkboards should be at eye level, low enough for children to see their own work and the work of others.

Adequate storage facilities, low enough to be accessible for children to use, encourage independence and self-reliance and, at the same time, release the teacher for her guidance role. Low cupboards and open storage space should provide for children's materials: blocks, books, art and related materials, music, and accessories for dramatic play, science, and other activities.

Clothes closet space for children and the teacher, and light, stackable cots for resting should be provided. A separate room for resting and sleeping is preferable. A room should be provided for a child who is sick or requires extra rest. An attractive room made available to parents for their activities makes them feel welcome in the school.

Plenty of space, carefully planned, should be provided for materials and equipment. These should be arranged to permit children to move about freely and to allow different activities to be carried on easily at the same time. Interest centers, such as space for block building, should include shelves with related material for immediate accessibility, thus eliminating movement to another part of the room which would interfere with children in other activities. A housekeeping corner, away from activity and arranged with screens which serve as dividers, provides privacy and an opportunity for children to assume different family and neighborhood roles. There should be ample

Board of Education, New York, N.Y.

Each child should have an easily accessible place of his own for his belongings.

floor, table, or easel areas for creative activities; areas for quiet listening to recordings; space for browsing with books, games, and puzzles relating to children's interests; woodwork and clay areas near wash basins; an area to sit and observe fish, animals, or sprouting seeds; an area to explore with a magnet or a magnifying glass; and space for musical instruments and for experimentation with them.

Outdoor.—The outside environment, like the indoor, is a learning laboratory for children. A wide range of activities is carried on out of doors, such as painting; dramatic play; listening to music and stories; building with large blocks; playing on equipment; playing with sand and water; gardening; taking walks to observe plants, soil, rocks, animals; and playing with wheel toys.

Outdoor play space should be fenced in to insure safety, landscaped to define activity areas, and be readily accessible and large enough to accommodate children's varied activities. The space should include

hard surface for wheel toys, soft surfaces for gardening and digging, and grassy areas for activities like games and stories. Surfaces under apparatus should be covered with tanbark or other soft materials. Both sunny and shaded areas are needed—well drained and free from rocks, ditches, and other accident hazards. An outlet for running water is necessary for water play.

Stationary apparatus should be firmly anchored in the ground. Portable equipment can be put to flexible use in various locations. Storage space is necessary for housing such equipment as boxes, boards, wheel toys, balls, tools, and other materials.

Suggested Equipment and Materials for Various Activities.— The equipment and materials listed below are suggested for nursery schools and kindergartens according to the type of activity or experience:

Active work and play

- Ladders, slides, jungle gym, and saw horses
- Crawling-through apparatus
- Packing boxes, large blocks, smooth boards, and kegs
- Wagons large enough to hold a child, tricycles of proper size, and wheel toys
- Large and small balls and bean bags
- Mallet with peg set for younger children, and workbench of correct height with soft wood and tools of good quality for older children
- Swings with canvas bucket seats
- Gardening tools
- Storage unit for outdoor play equipment.

Quiet work and play

- Books and pictures for young children (anthologies for the teacher)
- Projection equipment, slides, and films
- Simple globes and maps for older children
- Viewmaster with slides
- Puzzles and matching picture games
- Crayons, paper, blunt scissors, and paste
- Mats, cushions, and rocking chair
- Water play toys
- Large wooden beads for young children, smaller ones for older ones
- Aquarium.

Art and music experiences

- Easels, paints, crayons, chalk, clay, sand, and paste
- Brushes, scraps of materials, sponges, large paper, and pictures
- Hammers, saws, nails, screws, and soft wood

Alameda County Schools, San Lorenzo, Calif.

Young children learn fundamental rhythms through the use of simple instruments.

- Record player and records
- Simple instruments: bells, sticks, drums, triangles, cymbals, and tone blocks
- Tape recorder.

Other creative play—quiet or active activities

- Art and music materials
- Playhouse with furnishings and equipment, including those for cooking and laundering
- Floor blocks with accessory toys, such as family figures and farm and zoo animals
- Transportation toys: trucks, trains, airplanes, and boats
- Ride-a-stick horse
- Toy luggage and toy telephone
- Dress-up clothes
- Hats for astronauts, firemen, postmen, and others
- Sandbox and sand toys
- Toys for water play

Bureau of Publications, Baltimore, Md., Public Schools

An aquarium offers endless opportunities for children to observe and care for water animals. Note the hand lens for closer examination.

- Hand puppets
- Soft wood, hammers, saws, nails, and paint.

Experiences in science and numbers

- Garden plot and gardening tools
- Large outdoor and indoor thermometers
- Aquarium, terrarium, and animal cages
- Sundial
- Magnets, magnifying glasses, prisms, containers, and batteries
- Lock with key
- Scales, clocks, foot rules, and yardsticks
- Clock with large face and Arabic numerals
- Balls of several sizes
- Pint, half-pint, and quart measures
- Toy cash register
- Number games.

Keeping Records and Reporting Progress

Records which contain pertinent, consistent, and objective data are essential to the guidance of children. Their major function is to further the teacher's understanding of the child's development and behavior in order to plan appropriate experiences and guidance for him, and to share his progress with parents. Beginning with his entrance in school, a cumulative record folder is begun for each child which includes data pertinent to the various aspects of his growth and achievement in later years. This becomes a permanent longitudinal record of his development and progress in the elementary school.

Although forms and details vary, these cumulative records tend to include the following kinds of information about individual children: the home and family background; developmental history: health, weight, height, and growth data; data on social behavior and interaction with peers and adults; recurring patterns of behavior; dislikes and avoidances; achievements, potentials, and interests; and apparent feelings about themselves and other people.

Teachers obtain the data from a variety of sources: preschool registration, conferences with parents, home visits, their own day-to-day observations and anecdotes of what children do and say in given situations, diaries, sociometric measurements, results of examinations, and observations made by specialists including physicians, nurses, psychologists, and social workers.

Teachers through training and experience develop skill in objective observation and recordkeeping, which is necessary for the study of children's behavior and development. With such skill the teacher acquires the knowledge and insight needed for making some interpretations of her records. The evaluation of children's progress in nursery school and kindergarten is thus a continuous process which teachers make, as developmental and behavioral changes in children are observed over a period of some time. Teachers realize that the

causes of behavior are multiple and interrelated; therefore, they avoid hasty conclusions about a child's patterns of behavior and development.

Reports are to share with parents the knowledge gained of the child's growth—his level of ability, social behavior, work and health habits, physical growth, special interests, creative activities, and intellectual learnings.

In many communities, parents and teachers work together to develop ways of communicating, which enable them to understand each other and to be consistent in guiding the learning and growth of children. Information contributed by the parents helps the teacher to understand the child better and to plan for his needs. Through an interchange of information and the pooling of experiences, parents and teachers gain in understanding the reasons for the way a child learns and behaves. This understanding may contribute to better parent-child relationships and assist the parent in understanding the child, his relationship with others, and his progress.

There are various ways for parents and teachers to communicate about children: letters and notes; checklists; conferences—individual and group, scheduled and informal; visits to home and school; and telephone calls for informal contacts. All are important means of communication.

The most common and satisfactory method of reporting a child's growth and progress in the nursery school and kindergarten is probably the individual parent-teacher conference. At the kindergarten level, the individual conference, often combined with some type of informal written report in the form of a narrative note, a checklist, or a summary of the child's progress at the end of the school year, is generally used.

Working With Parents

PARENTS TODAY ARE PARTICIPATING more in school activities and coming into closer relationships with the school. This changing role of the parent is a promising development in education, and particularly necessary when young children are involved. The child's nursery school and kindergarten experiences are similar in some ways to those provided in the home. The school supplements and builds on the foundation which the home provides. So, the guidance of young children at home and at school is viewed as a single cooperative undertaking, rather than two different jobs performed by teachers and parents independent of each other.

The teacher realizes that understandings and skills when shared strengthen both herself and the parent. She knows that each possesses competencies which should be focused on planning and guidance in the home and the school. In order to move into this cooperative relationship, however, the teacher first demonstrates to parents not only what a child's world can be but also what kind of people their children can be in an environment which promotes each child's greatest strengths. The first step in parent-teacher relations is to show real appreciation of children by providing opportunities for them to be happy, desirable, achieving people. However, teachers need to help parents see the nursery school as an extension of the opportunities which the home offers, not as a substitute nor as a competitor (19:2).

The form which cooperative activities takes is perhaps secondary to the readiness of parents and teachers to engage in them. Some of the experiences which are found to be satisfying and productive include opportunities for parents to—

Meet and talk with teachers concerning matters of mutual interest, school policies, and program

- **Visit the school, often with the child, to see the children and teacher at work**

- Confer with the teacher in order to further mutual understanding of the child and his all-round development, and to discuss appropriate experiences for him at home and at school
- Explore problems of child behavior and learning with teachers
- Engage in group discussions and parent study groups pertaining to child development, behavior, and learning.

Gain greater insight and understanding in child guidance and family life

- View films, listen to lectures, and observe children's behavior in the school situation
- Talk with professional personnel in special fields as indicated by the needs of the child and his parent
- Enjoy activities planned for families under home-school sponsorship
- Participate in group discussions and activities which further insight into human relations.

Participate in school activities

- Act as host or hostess for preschool children and their parents at time of registration and on other occasions
- Assist in registration of new children and in health examinations
- Assist in providing and improving school equipment and materials
- Work on school committees
- Serve as resource persons to class groups in the area of a particular specialty, such as playing a musical instrument for the enjoyment of the group, telling stories, and explaining about their jobs or work
- Participate in the development of handbooks, bulletins, or manuals for parents pertaining to the program and policies
- Help with transportation and care of children on educational trips and special activities.

Many parents, in addition to the deeper understandings and strengthened relationships gained, acquire helpful information and techniques for working with their children. Those from low economic and cultural levels benefit greatly from special programs in parent education. Some become acquainted with songs, recordings, children's books, games and toys, information about nutrition and child care which enable them to provide better experiences and care for their children at home.

Both the school and the home are strengthened, each for its unique role, through an early beginning in working together. Each gains insights and skills, which often modify attitudes. For education to make real progress, the understanding, contributions, and support of parents are needed.

Evaluating and Looking Ahead

Criteria for Evaluation

CERTAIN CRITERIA characterize good schools for young children. The following may be used as a guide in evaluating a nursery school or kindergarten. A good school for young children has—

1. An environment which provides—
   - Adequate physical space both inside and outside for facilitating an educational program for young children
   - Outdoor space which is readily accessible, protected, safe, and equipped to accommodate a variety of activities
   - An attractive, healthful, indoor environment housed in a functional and safe one-floor structure (or approximately at ground level)
   - An arrangement of space, equipment, and materials indoors and outside which provides a laboratory for the learning, growth, and development of children
   - Suitable materials and resources, readily accessible, to meet the needs of the individual children in the group
   - Adequate facilities for preparing and serving food; for rest and relaxation.
2. Materials and equipment which encourages—
   - Active work and play
   - Quiet work, play, and relaxation
   - Creative work and play
   - Learning and growth—social, emotional, physical, and intellectual.
3. Professionally qualified teachers who—
   - Are mature, warm, and sincere and who like and respect young children and enjoy teaching them
   - Possess personal and professional qualifications for teaching young children, including a degree, or its equivalent, in early childhood education from an approved college or university
   - Welcome parents to the school and work with them with understanding and skill.

4. Approximate teacher-pupil ratios for three different age groups:
   - 3-year-olds—1 teacher and assistant for 10 to 15 children
   - 4-year-olds—1 teacher for 15 to 20 children
   - 5-year-olds—1 teacher for 20 to 25 children.
5. A program that provides for children to—
   - Work and play alone and in groups
   - Be free from excessive fatigue and overstimulation
   - Benefit from a balanced day of activities—indoor and outdoor, active and relaxed
   - Help themselves in washing, dressing, eating, toileting, and cleaning up
   - Engage in experiences which are suitable to their needs and maturity, with encouragement and time to progress each at his own rate
   - Play actively, involving large muscle activity
   - Have midmorning or midafternoon snack, rest in a prone position; have hot lunch at noon and rest on cots in all-day programs
   - Express themselves creatively through language, movement, music, art, and construction
   - Learn about their environment by exploring, observing, listening, discussing, touching, tasting, and smelling
   - Think, make discoveries and simple generalizations, and solve problems
   - Enjoy stories, music, rhythms, poetry, and illustrations
   - Share and make friends in work and play
   - Live happily and productively with peers and adults
   - Extend their interests and broaden their knowledge about their world.
6. Active parent participation and involvement
7. Provisions for discovering each child's social, cultural, and intellectual strengths and needs; and for giving him appropriate guidance.

A Look Ahead

The good school for young children offers the foundation of a child's education and provides educative experiences for the parents. It is a means toward extending the existing knowledge on how children learn, behave, and develop. Strides continue to be made in the research on all aspects of child growth and learning. The findings from this research, new curriculum developments, and the insights of those who are working with young children influence favorably the educational opportunities offered by nursery schools and kindergartens. Significant research will probably continue, and good programs for young children will increasingly reflect deeper insights about their potentials for total growth, learning, and health.

Progress should result from greater concern for oral communication and the personal meaning of language for the child, and for "newer and broader conceptions of readiness for learning aimed at breadth, depth, and continuity of development." (9:7) As suggested by Wann and others, certain concepts concerning language need to become important in selecting educational content for young children. The areas which should receive attention include the role of speaking and of listening in communication, readiness to develop skills in reading and writing through all the child's experiences, and communication as art—as having an artistic dimension (50: 113).

Increasingly vital content which has interest, concept development, and problem-solving value for children will continue to be identified and utilized in more programs. Such content will involve the children's social world, their immediate and expanding environment, and the phenomena that surround them. More sensitive guidance on the part of teachers in the social processes and deeper understanding of content which is significant to young children will be a characteristic of the developments ahead (9:7). It is important that teachers and administrators become more and more inventive in providing better materials and equipment, and in using these for creative and meaningful learning.

Professionally competent teachers, creative leadership, and cooperating citizens are essential in improving and providing educational programs for more young children. The environment must be one which will protect all children—the advantaged and the disadvantaged—give them psychological and physical support, and facilitate their fullest development. The curriculum must put the child first. It should promote sound health, learning, and personality development. The total enterprise is a measure of the community and Nation's response to young children's urgent need for education in this age.

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